

# Implementing Diagnosis-Related Groups (DRGs)

Dr. Léon von Brasch

- 1. Introduction to HELIOS**
- 2. Why a new hospital reimbursement system?**
- 3. DRG systems: basic functioning**
- 4. G-DRG system: implementation in Germany**
- 5. DRGs: process of coding**
- 6. G-DRG system: effects**
- 7. Feared adverse effects**
- 8. Improving medical quality (HELIOS)**

## The Health Care Group

**FRESENIUS**

**FRESENIUS  
BIOTECH**

Antibodies / Cell Therapies

  
Fresenius Medical Care



- Dialysis Products
- Dialysis Care
- Extracorporeal Therapies

 **FRESENIUS  
KABI**



- Clinical Nutrition
- Infusion Therapy
- Transfusion Technology

 **FRESENIUS  
HELIOS**



- Operation and management of acute clinics and rehabilitation centers

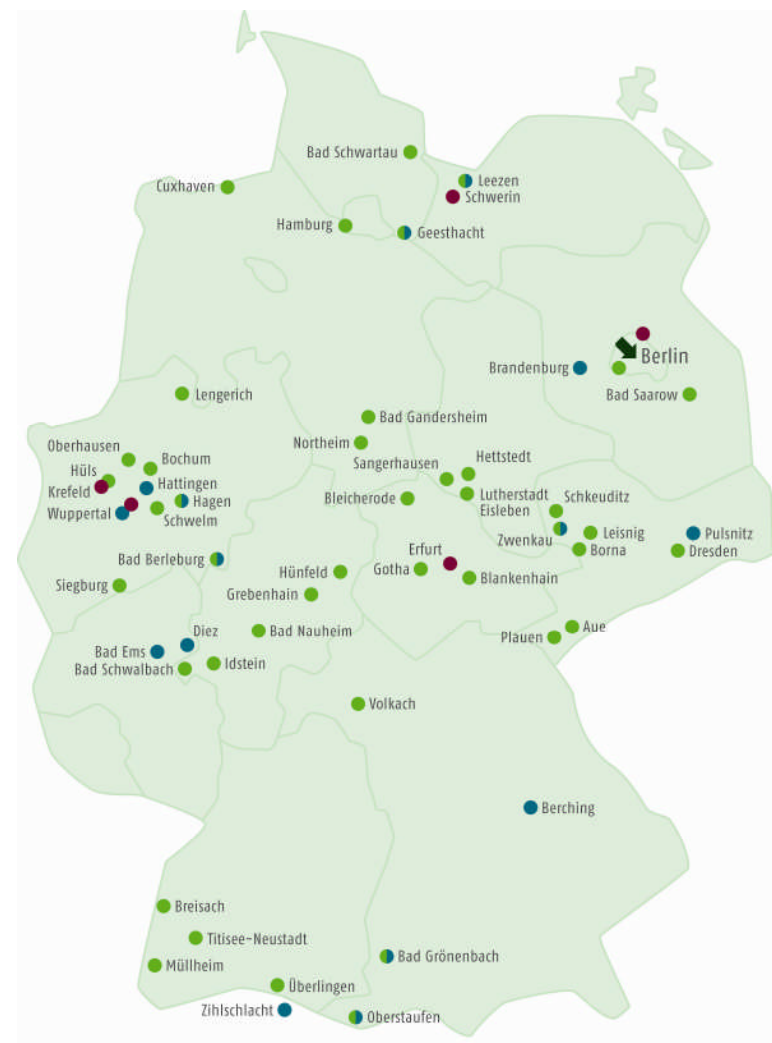
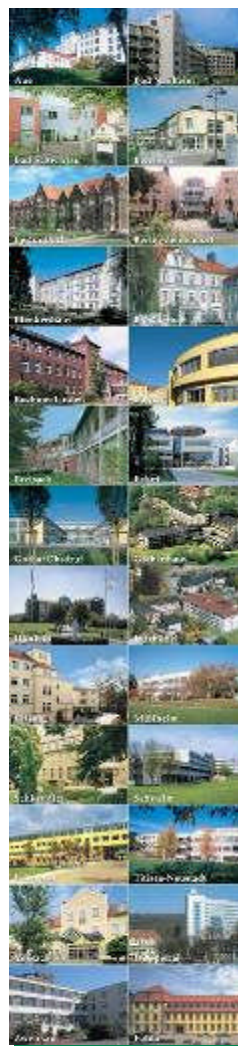
 **FRESENIUS  
VAMED**



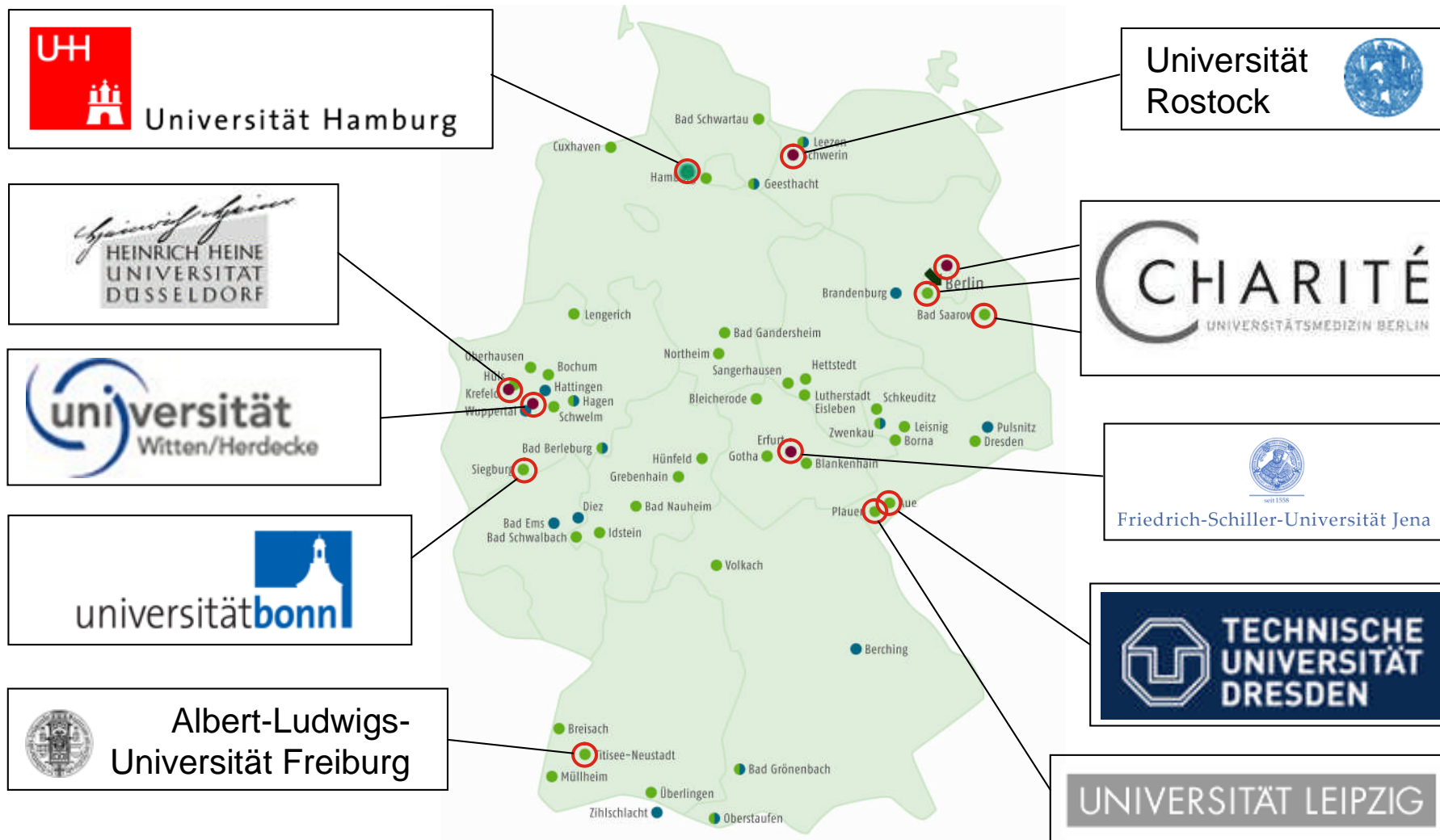
- Technical service for health care facilities

# HELIOS-Kliniken Group 2008

- Since 1994
- 62 hospitals
- 18.000 beds
- 94% of G-DRGs
- 600.000 stationary patients p.a.
- 2 mio patients total
- 32.000 employees
- 2,1 bn € revenue
- 5 max. care hospitals



# 12 academic teaching hospitals



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## Background health care reform

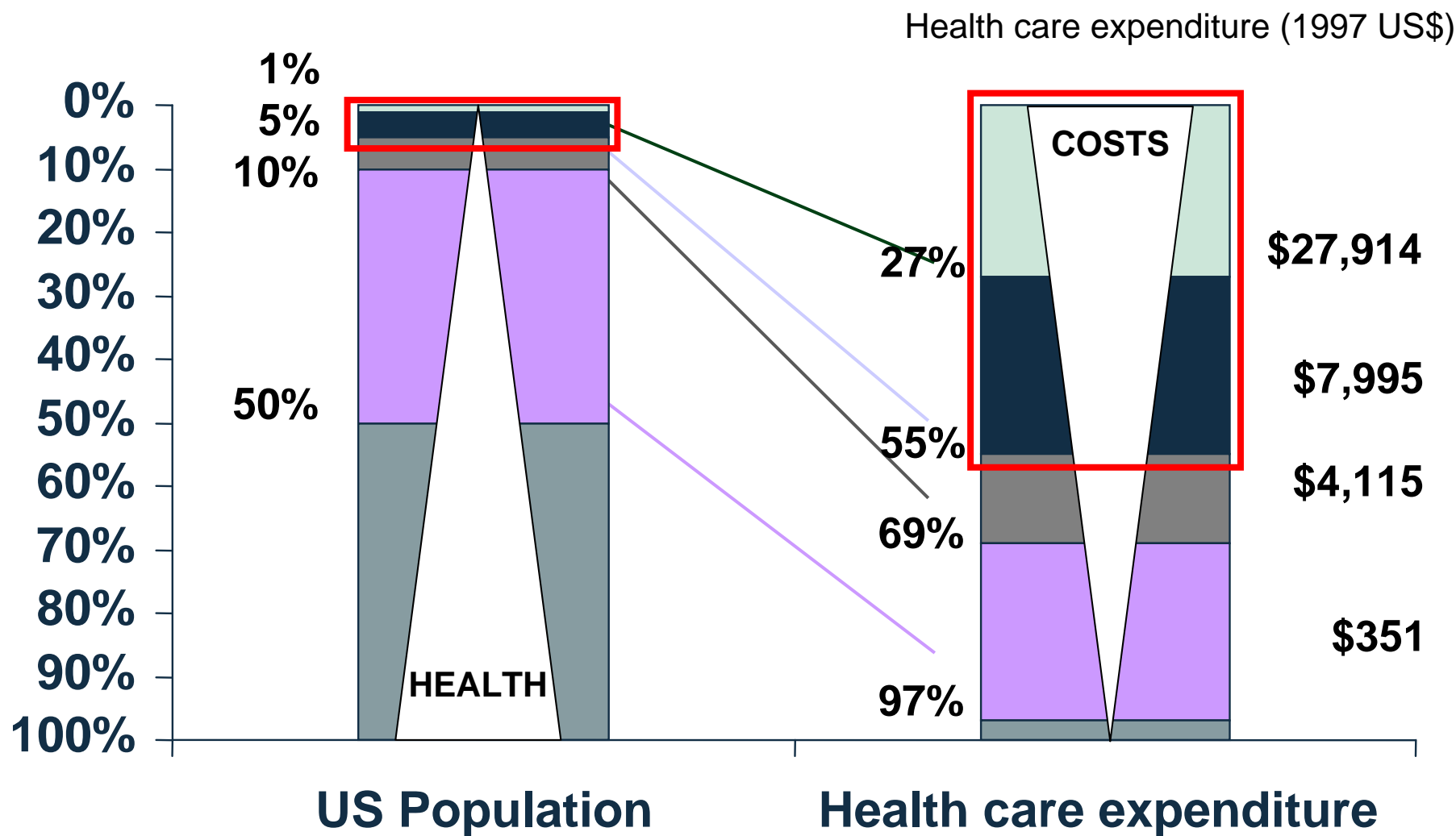
- Increasing costs in the health care system
  - Increased life-expectancy: aging population leads to rising number of patients with chronic diseases and multi-morbidities; increased per head health care expenditure
  - Innovations, i.e. new therapeutic agents and technological equipment; better treatment, but generating rising costs
  - Increasing demand for health care services by patients



Rising costs for payor



# Health care expenditure distribution

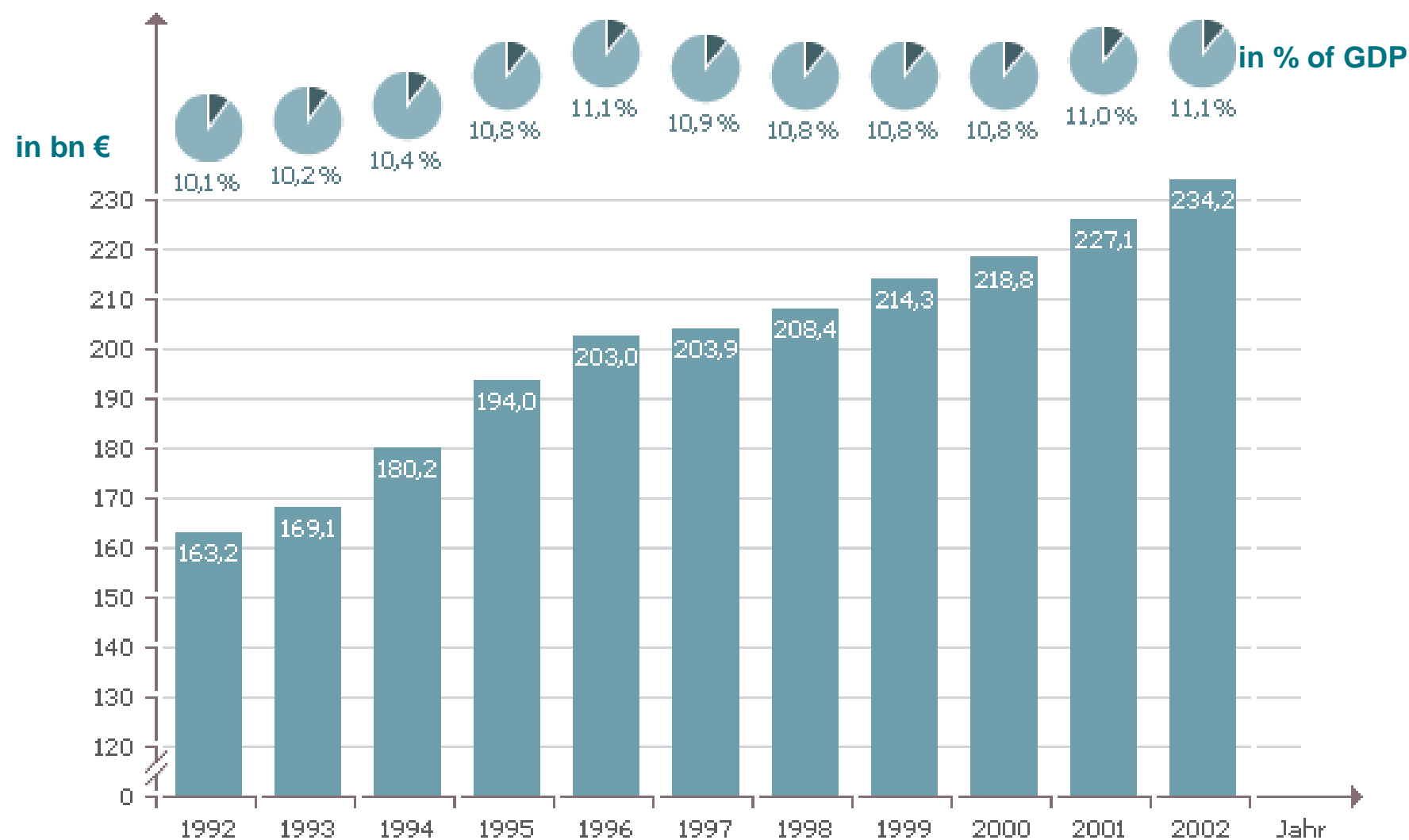


Monheit 2003 und Berk & Monheit 2001





## Health care expenditure rise before DRG




## Background health care reform

- Reduction of revenue for payors
  - Unemployed, retired part of population increases; no contribution
  - Number of employed, paying contribution decreases

➡ Reduced finances for payors

## Background health care reform

- Payor expenditures:
  - 32,3% of costs for in-patient care; largest single field of expenditure
  - Germany compared with 14 other Western countries:
    - 6,3 hospital beds vs. 3,9 hospital beds average per 1.000 inhabitants
    - 9,3 days: longest length of stay (LOS)
    - 3,3 physicians vs. 3,0 physicians per 1.000 inhabitants

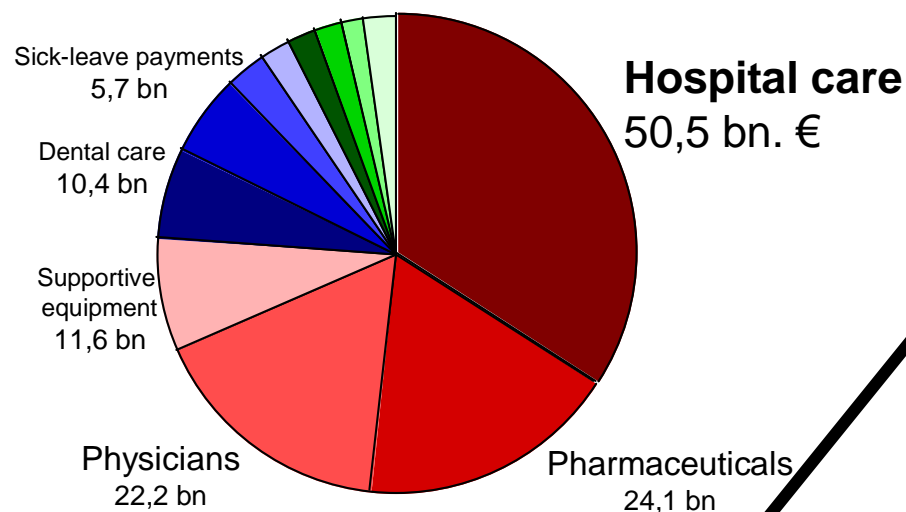
 Efficiency? Over-supply?

# Situation in Germany

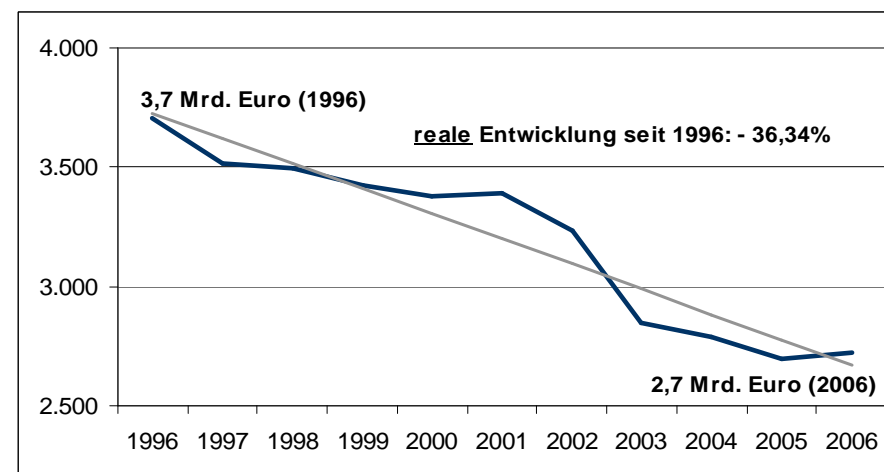
## — Health care expenditure: 2006

Cost distribution SHI

147,6 bn € in 2006  
(138,8 bn € in 2001)



**Reduction:**  
Federal health care investments  
in mil €



BMG

Dr. Steiner, DKG

## Structure

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## DRGs

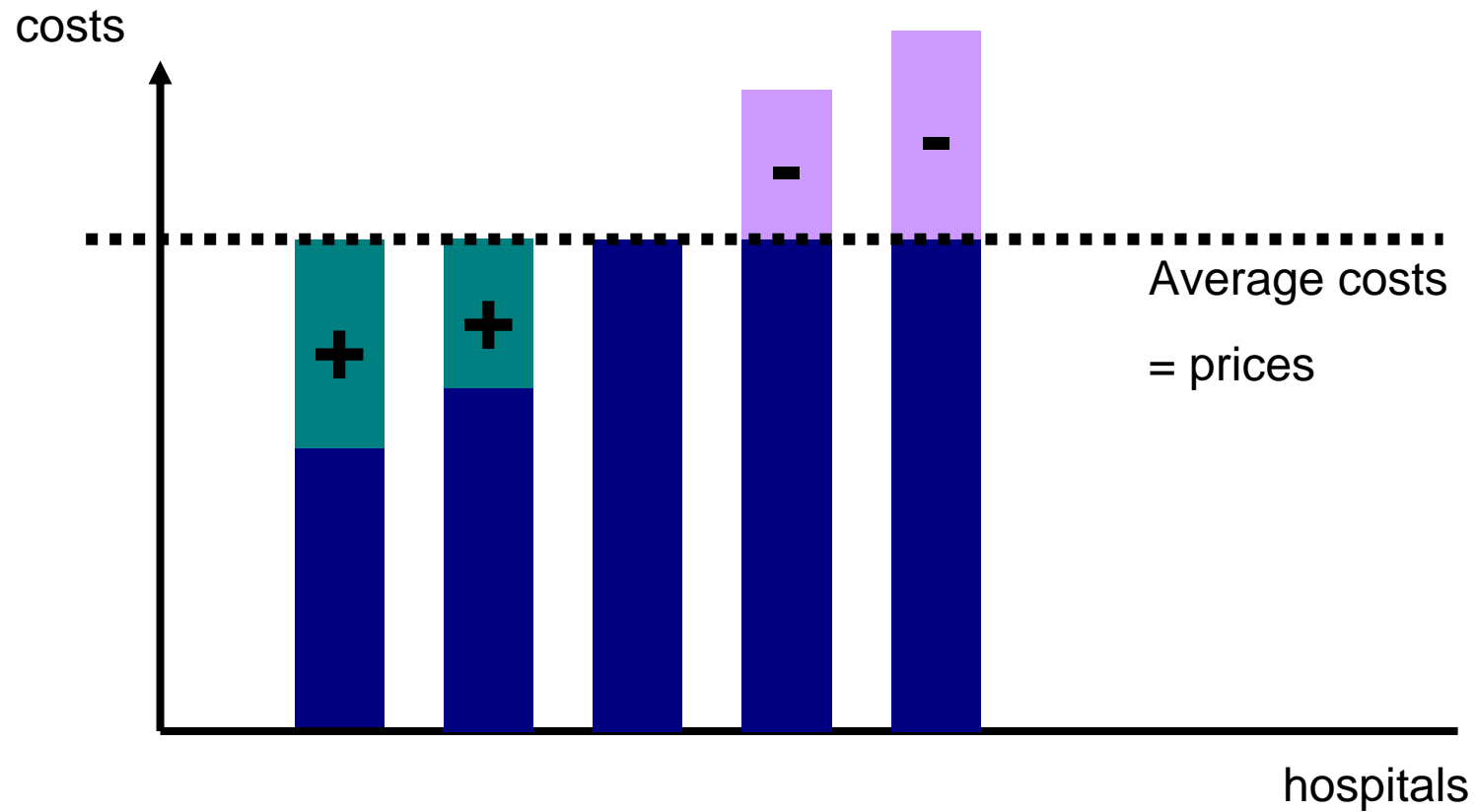
- **Comparability, Transparency**
- **Cost containment**
- **Efficiency gains, reduction of supply**

↳ **Yardstick competition**

- Yardstick competition
  - Asymmetry of information (payor – provider)
  - Introduction of competition: reimbursement equal to average costs of different providers
  - Cheap providers win / costly providers loose (cheap = efficient?)
  - Annual adaptation
  - Quality control mechanisms necessary

## Yardstick competition:

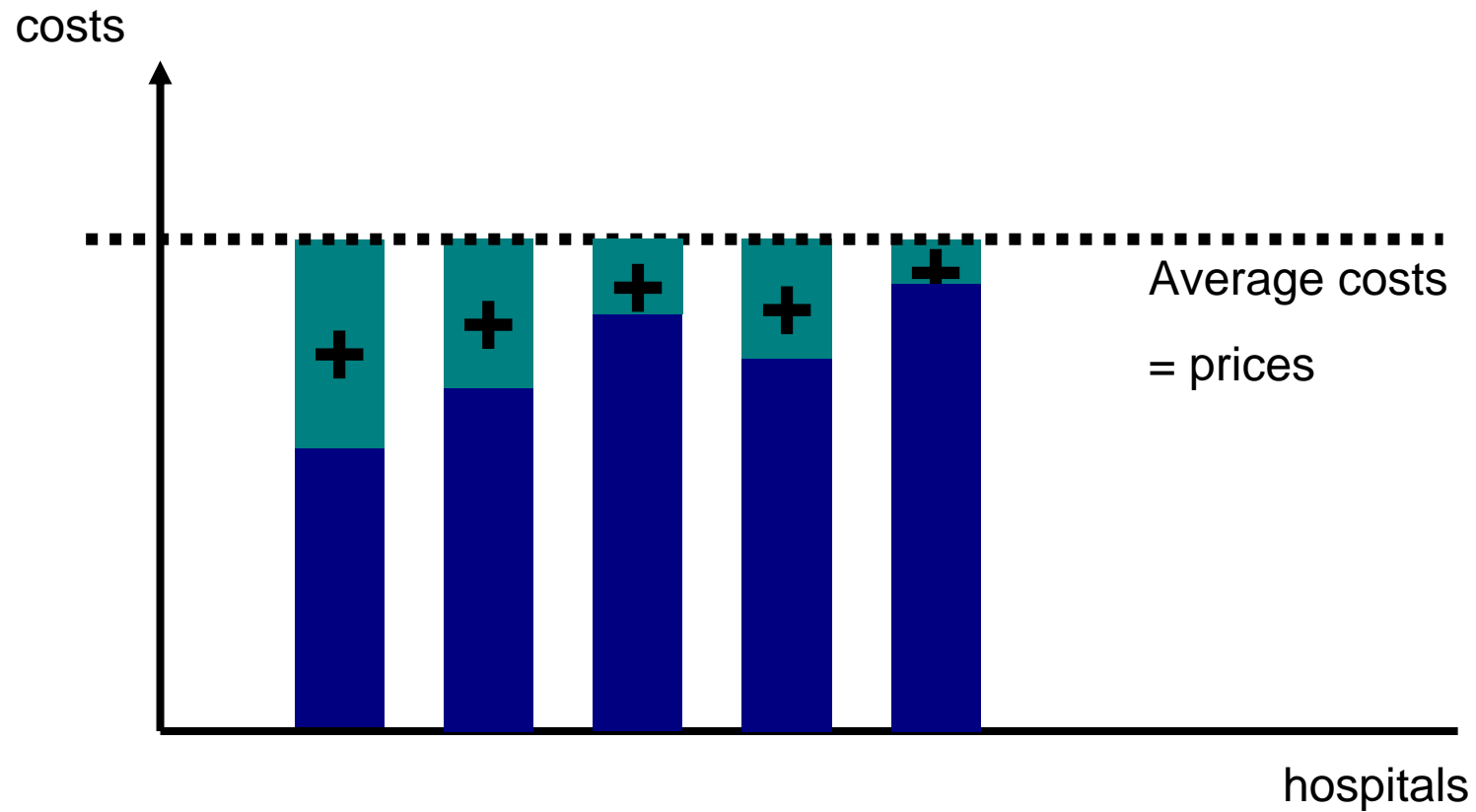
## 1) price definition





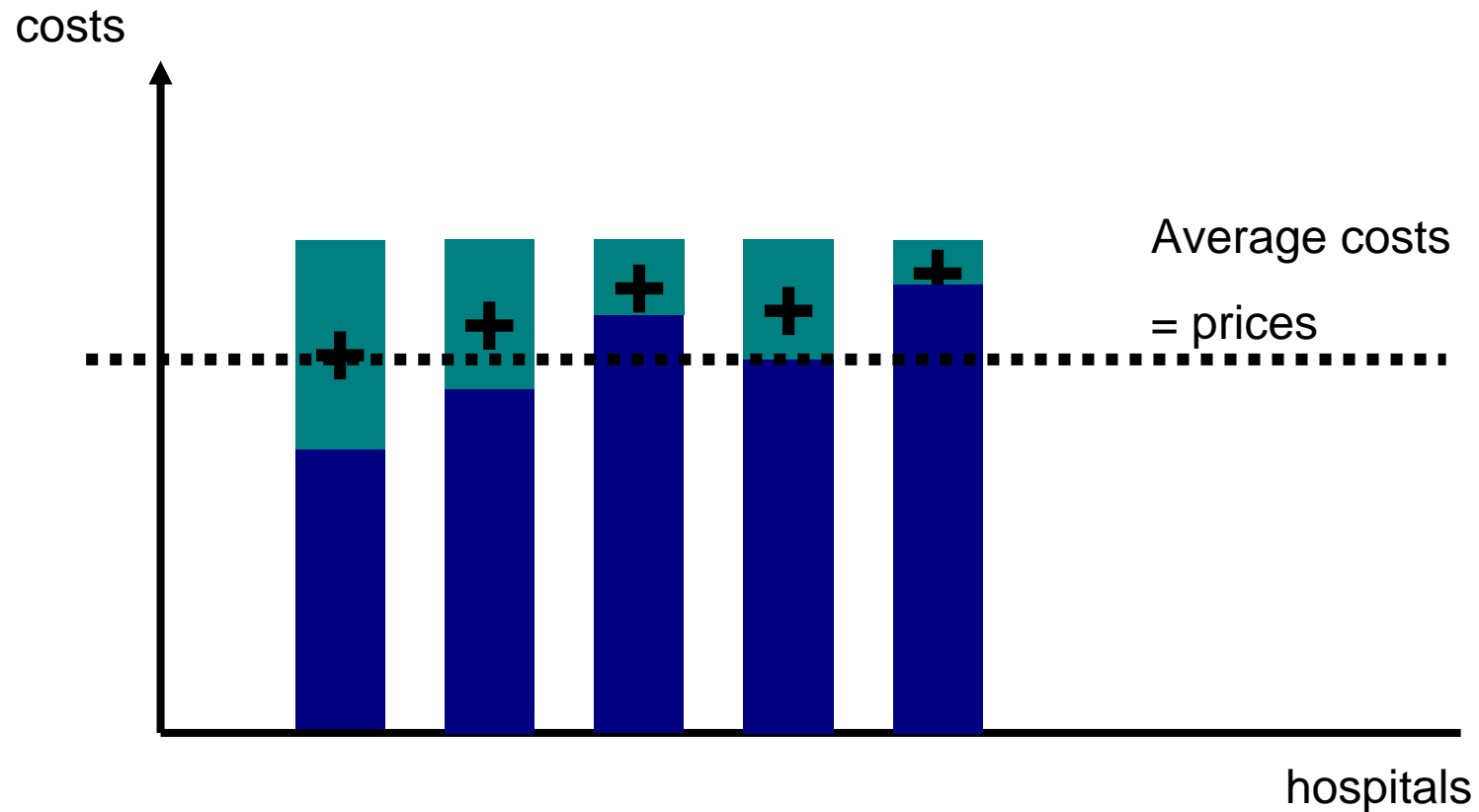
**Yardstick competition:**

**2) adaptation**



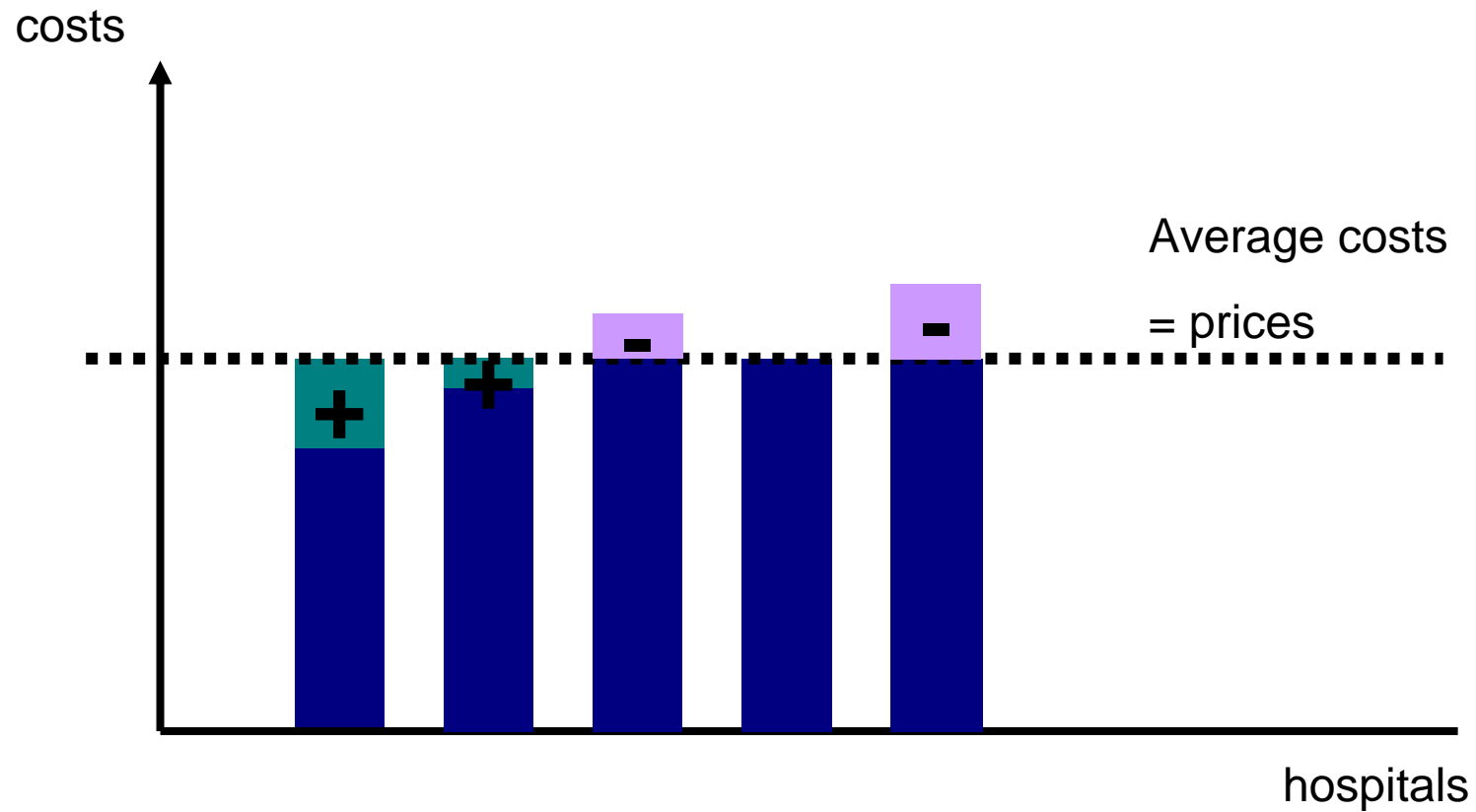
**Yardstick competition:**

**3) new average costs**



## Yardstick competition:

## 4) new prices





## What is ICD-10?

- **International Statistical Classification of Diseases and Related Health Problems (10th edition)**
  - detailed description of known diseases and injuries
  - published by the World Health Organization
  - used world-wide for morbidity and mortality statistics and DRG coding
  - revised periodically; currently the tenth edition (ICD-10)
  - every disease (or group of related diseases) is described with its diagnosis and given a unique code, up to five letters long
    - Example: Prostate cancer, ICD-10 code: C61

- Derived from Australian Refined Diagnosis Related Groups (AR-DRG):
  - AR-DRG Classification system is based on hierarchies of diagnoses and procedures
  - Demographic and clinical edits
  - Major Diagnostic Category assignment (23 MDCs); i.e. medical specialties
  - Adjacent DRG assignment (104 ADRGs)
  - Complication and comorbidity level (CCL) assignment
  - Patient clinical complexity level assignment (PCCL)
  - DRG assignment (661 DRGs)
- Special: system evaluates ALL secondary diagnoses or complications

# G-DRG



MDC Code	Text				
Pre A	Kostenintensive Ausnahmefälle				
01 B	K/S des Nervensystems	13 N		K/S der weiblichen Geschlechtsorgane	
02 C	K/S des Auges	14 O		Schwangerschaft, Geburt und Wochenbett	
03 D	K/S im HNO-Bereich	15 P		Neugeborene	
04 E	K/S der Atmungsorgane	16 Q		K/S des Blutes, der blutbildenden Organe & des Immunsystems	
05 F	K/S des Kreislaufsystems	17 R		Hämatologische und solide Neubildungen	
06 G	K/S der Verdauungsorgane	18 S, T		Infektiöse und parasitäre Erkrankungen	
07 H	K/S an hepatobiliärem System und Pankreas	19 U		Psychische Krankheiten	
08 I	K/S an Muskel-Skelett-System und Bindegewebe	20 V		Alkohol-/Drogengebrauch	
09 J	K/S der Haut, Unterhaut und Mamma	21 W, X		Verletzungen, Vergiftungen und toxische Wirkungen	
10 K	Endokrine, Ernährungs- und Stoffwechselkrankheiten	22 Y		Verbrennungen	
11 L	K/S der Harnorgane	23 Z		Faktoren, die den Gesundheitszustand beeinflussen	
12 M	K/S der männlichen Geschlechtsorgane	Error 9		Fehler DRGs 7 9 +2	

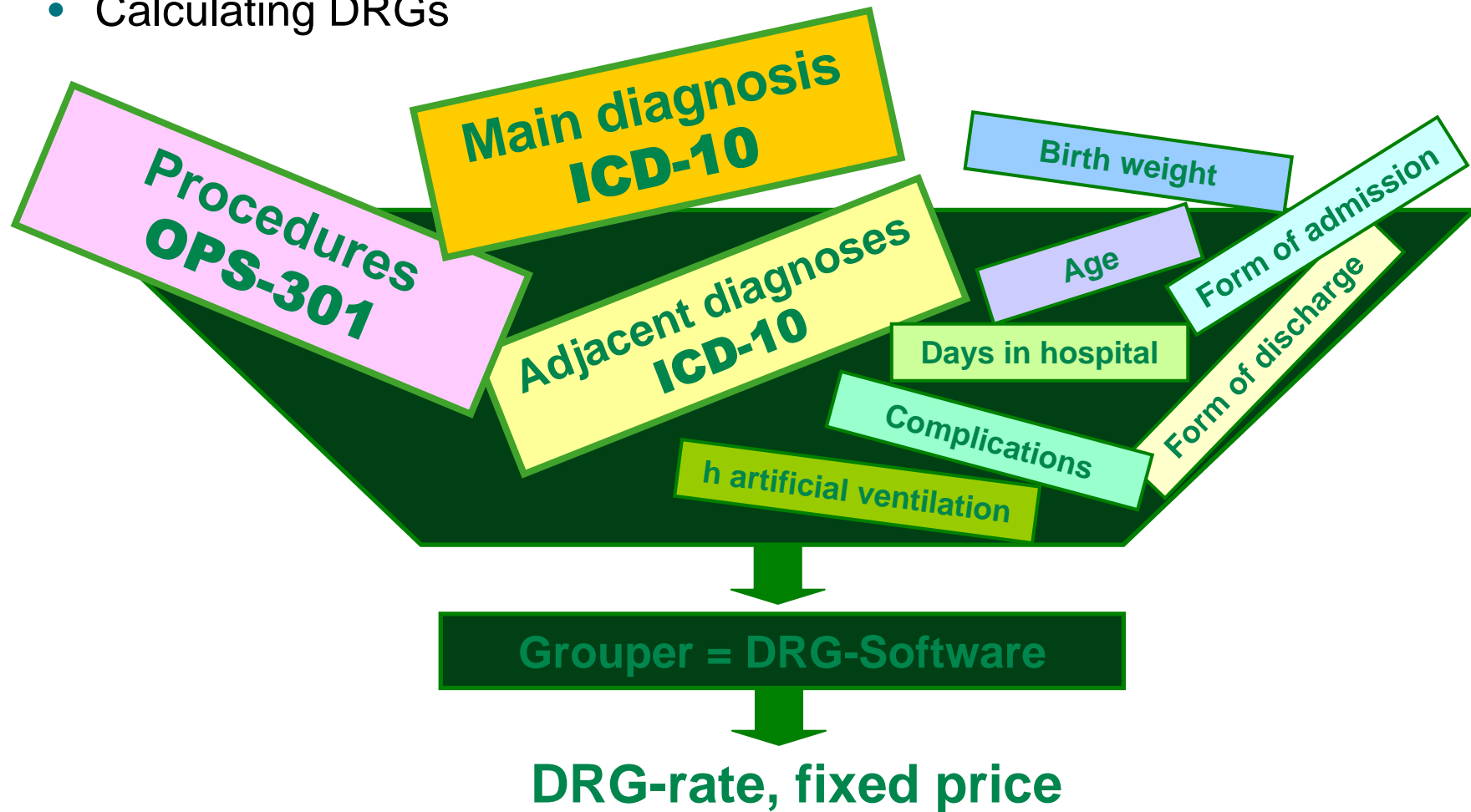
## DRG F67A

Medizinische Partition (01-75)  
Hier: 67=Bluthochdruck

A = schwerste (=teuerste) CC-Kategorie  
 B = schwer  
 C = mittel  
 D = einfachste Kategorie;niedriger Ressourcenverbrauch  
 Z = keine CC-Unterteilung

**Categorisation for Complexities and Comorbidities „CC“**  
 → adjunct diseases, leading to more intensive and more costly care

- Calculating DRGs



# DRG-grouper



## G-DRG Online Grouper

Alter [J]	Alter [T]	Vwd	Geschlecht	Entlassungsart	Beatm. [h]	Aufn.-G. [g]	Einweisung	Tagesfall
60	0	20	männlich	D1 reg. beendet	0	0	freiwillig	nein
Abteilungstyp				Aufnahmearrass				
1 Hauptabteilung				E Einweisung				

### Grouping - Ergebnisse

DRG **M60B Bösartige Neubildungen der männlichen Geschlechtsorgane, ein Belegungstag oder Alter >10 Jahre, ohne äußerst schwere CC**  
MDC **12 Krankheiten und Störungen der männlichen Geschlechtsorgane**  
PCC **2 mäßig schwere CC** Status **00 Normal gruppiert** Pat.-Status **Langlieger**  
Entgelt inkl. Zu- Abschl. Basisbetrag **1.763,20 €** Rel.-Gew. **0,608** 1. Tag mit Abschlag **1**  
**3.694,60 €** Zuschlag **1.931,40 €** Eff.-Gew. **1,274** 1. Tag Zusatzentg. **12**

Gruppieren Reset DRG Version G-DRG Version 2005 Basisrate 2900,00 EUR

### Diagnosen

ICD-10 Version GM 2005

Hd	Nr	Kode	CCL	Gült	DRG	Text
<input checked="" type="radio"/>	Dx1	C61	0/0	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Bösartige Neubildung der Prostata
<input type="radio"/>	Dx2	C22.9	2/2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Bösartige Neubildung: Leber, nicht näher bezeichnet
<input type="radio"/>	Dx3					bitte Diagnose eingeben
<input type="radio"/>	Dx4					bitte Diagnose eingeben
<input type="radio"/>	Dx5					bitte Diagnose eingeben
<input type="radio"/>	Dx6					bitte Diagnose eingeben
<input type="radio"/>	Dx7					bitte Diagnose eingeben
<input type="radio"/>	Dx8					bitte Diagnose eingeben
<input type="radio"/>	Dx9					bitte Diagnose eingeben
<input type="radio"/>	Dx10					bitte Diagnose eingeben

### Prozeduren

OPS-301 Version GM 2005

Nr	Kode	OR	Gült	DRG	Text
Px1					bitte Prozedur eingeben
Px2					bitte Prozedur eingeben
Px3					bitte Prozedur eingeben
Px4					bitte Prozedur eingeben
Px5					bitte Prozedur eingeben
Px6					bitte Prozedur eingeben
Px7					bitte Prozedur eingeben
Px8					bitte Prozedur eingeben
Px9					bitte Prozedur eingeben
Px10					bitte Prozedur eingeben

**Achtung: Dieser Online-Grouper ist nur für Demonstrationszwecke. Die Gruppierung von Echtdaten verstößt gegen die Lizenzbedingungen**



- Calculating DRGs: Base Rate und Cost Weight

$$\begin{array}{ccccc}
 3.200 & \times & 1,01 & = & \underline{\underline{3.232\text{€}}} \\
 \text{Base rate (BR)} & & \text{Cost Weight (CW)} & & \text{Reimbursement} \\
 \text{Basic rate for hospital} & & \text{Relative weight InEK} & & 
 \end{array}$$

- **Hospital specific** average cost of treated case

- Negotiated with payors

- Based on cost analysis

- Fixed entity

- Calculated from **empirical data**.  
Reflect treatment costs relative to average hospital care services



Relative weight; how many times average base rate will be paid as reimbursement

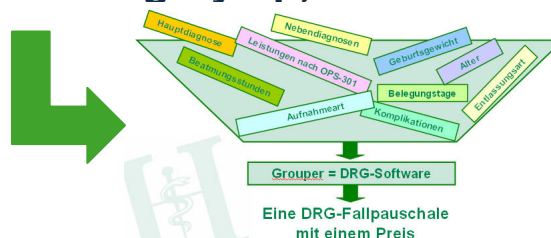
# G-DRG

- Calculating DRGs: Cost Weight depending on CC-category

$$\begin{array}{ccccc}
 \mathbf{3.200} & \mathbf{x} & \mathbf{1,01} & \mathbf{=} & \mathbf{3.232\text{€}} \\
 \text{Base rate (BR)} & & \text{Cost Weight (CW)} & & \text{Reimbursement}
 \end{array}$$

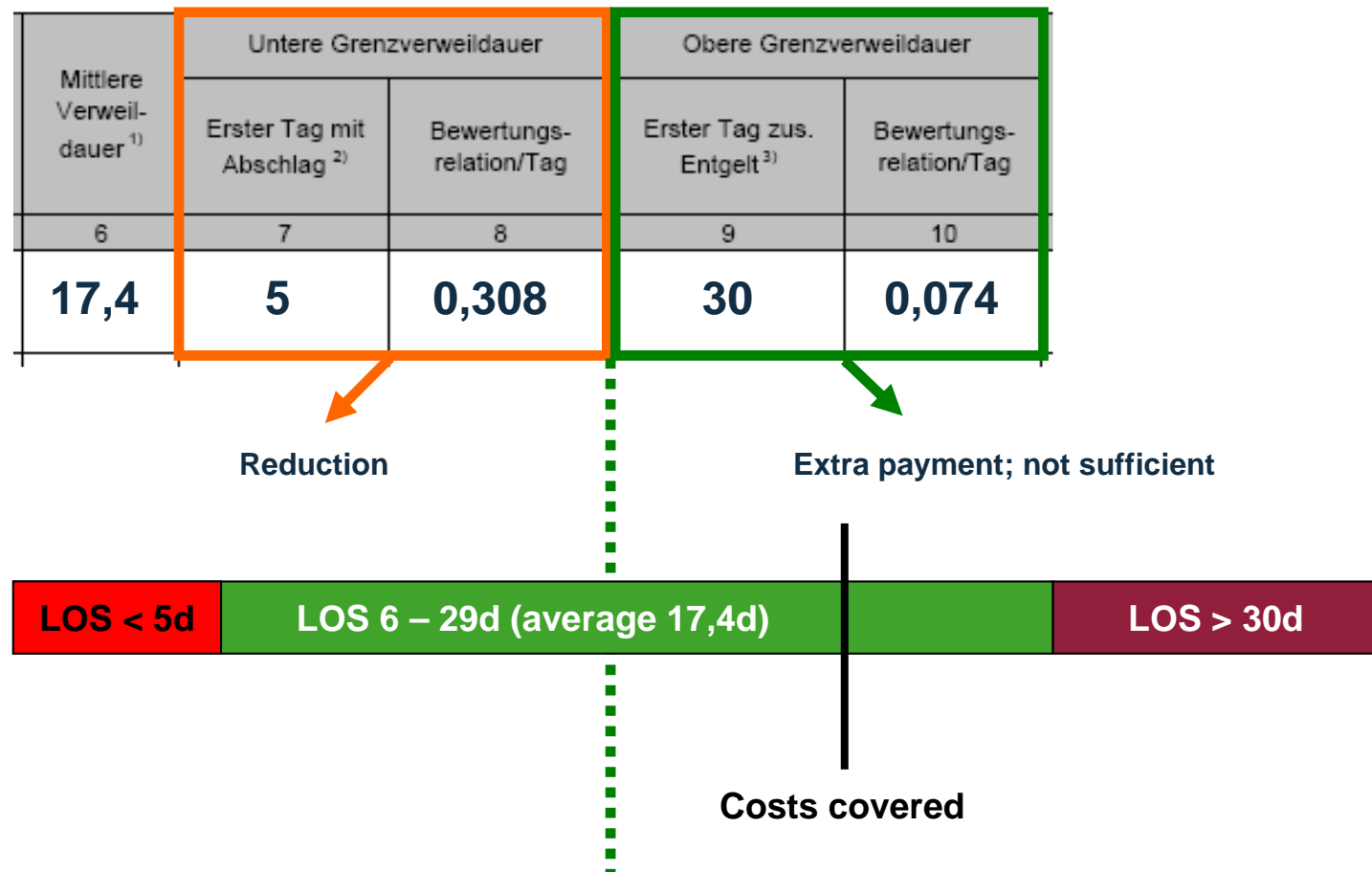
DRG	Parti-tion	Bezeichnung	Bewertungsrelation bei Hauptabteilung
1	2	3	4
G12A	○	Andere OR-Prozeduren an den Verdauungsorganen mit komplexem Eingriff	3,278
G12B	○	Andere OR-Prozeduren an den Verdauungsorganen mit mäßig komplexem Eingriff	1,732
G12C	○	Andere OR-Prozeduren an den Verdauungsorganen außer komplexe oder mäßig komplexe Eingriffe	0,682

CC category up, Reimbursement up



- importance of coding !

- Calculating DRGs: steering length of stay



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## German health care system basics

- Obligatory health insurance; Social Health Insurance (cover 89%), Private Health Insurance (cover 8%)
- Government sets legislative framework
- 16 Länder set plans of need (hospital beds, treatment licenses), co-financing investments in facilities
- >250 sickness funds (SHI) collected contributions based on wages, now one standard rate, have to contract listed health care providers, insurance companies pay providers
- SHI are chosen freely, obliged to accept any applicant
- PHI optional at certain income threshold, now have to offer SHI-similar schemes

- Lump-sum payment system demanded by legislator § 17b KHG (Absatz 1-5)
- Responsible:
  - German Hospital Association (DKG)
  - Central Association of Sickness Funds (GKV)
  - Association of Private Health Insurance Funds (PKV)
- Support:
  - Institute for the Hospital Reimbursement System (InEK)

## Conditions:

- All-covering, performance oriented, lump-sum reimbursement system for:
  - Inpatient and day-care services provided by hospitals.  
Exception: psychiatry
  - Taking into account: complexities and comorbidities
  - Uniform case-classification and uniform cost-weights
  - Additional payment to compensate for special burden
  - Orientation on internationally approved DRG-Systems
  - Development and contraction through the self-governing partners

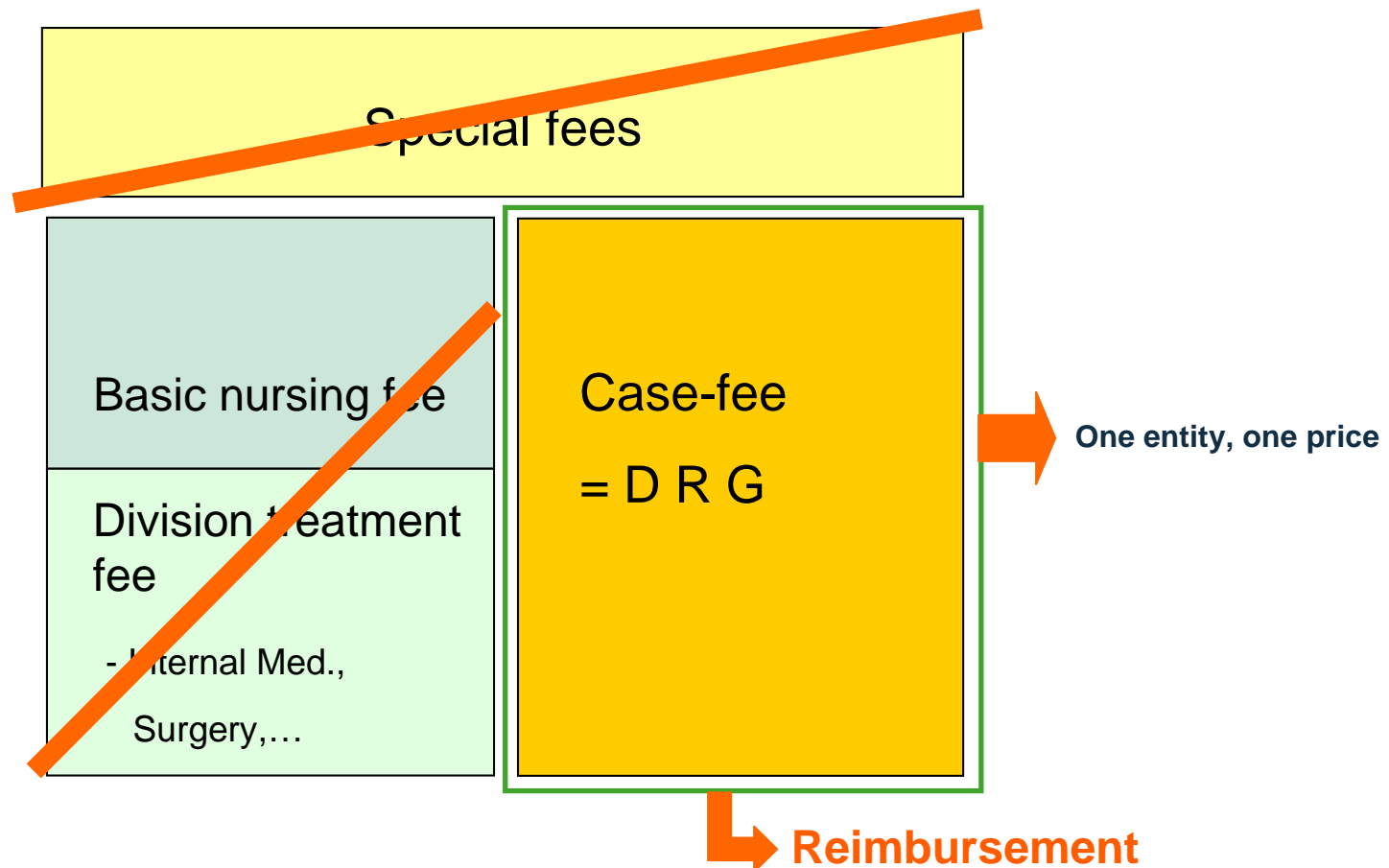


## DRG systems in other countries

Australia	AR-DRG	Germany	G-DRG	Romania	AP-DRG*
Austria	LDF	Greece	HCFA-DRG*	Scandinavia	NordDRG
Belgium	APR-DRG	Hong Kong	PRG	Singapore	AN-DRG
Bulgaria	AP-DRG*	Hungary	HBC	Spain	***
Canada	CMG	Ireland	HCFA-DRG 12.0	Sweden	NordDRG
Czechia	AP-DRG	Italy	HCFA-DRG 14.0	Switzerland	AP-DRG
Costa Rica	HCFA-DRG 11.1	New Zealand	AR-DRG	United Kingdom	HRG, HBG
Denmark	NordDRG	Netherlands	DBC		
Finland	NordDRG	Norway	NordDRG		
France	GHM 4.5	Portugal	HCFA-DRG 15.0		* =pending



- Introduction of the G-DRG System in Germany



# Introduction of the G-DRG System: steps taken

**1996**

- Introduction of ICD-10 based case fees in selected specialties

**2000**

- Definition of G-DRG features

**2001**

- Translation and adaptation of the Australian coding principles
- Definition of calculation methods
- Agreement on case groups

**2002**

- German coding guidelines made binding

**2003**

- Voluntary introduction of G-DRG system

**2004**

- Obligatory introduction of G-DRG system

**2009**

- uniform price system at Länder-level (disposed until 2010)

# Introduction of the G-DRG System: steps taken

- Who pays for the DRG system?
  - Costs of the Institute for the Hospital Reimbursement System (InEK):
    - since 2004 as DRG surcharge covered by hospitals
  - Information technologies and controlling activities:
    - Hospitals
  - Surcharges for training facilities:
    - all hospitals in a federal state (Land)
  - Quality assurance:
    - hospitals



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# 10 dimensions of DRG-coding quality

No.	Dimension	Description (Example)
1.	Completeness (patients)	Does every patient bear his own discharge data-set?
2.	Completeness (data)	Are all diagnoses and procedures captured?
3.	Accuracy	Are the codes used up to date?
4.	Legitimacy	Is coding legitimate according to German coding principles? E. g. readmitted patient is not a new case.
5.	Precision	Are the codes used precise?
6.	Plausibility	Is coding plausible (prostatectomy for a woman)?
7.	Freedom of duplicates	Is unpermitted double coding contained?
8.	Correctness	Does coding correctly reflect diagnoses and treatment?
9.	Effort-relatedness	Is every code reflected by an entry in the patient file?
10.	Appropriateness	Does coding properly reflect the case?

- Crucial: coding = reflected in letter of discharge, patient file
- Threat: loss for hospital

# Who shall be coding?

*Patient care, continuous education, research,...* **plus**

**Optimized  
capacity  
utilization**

**Interdisciplinary  
cooperation**



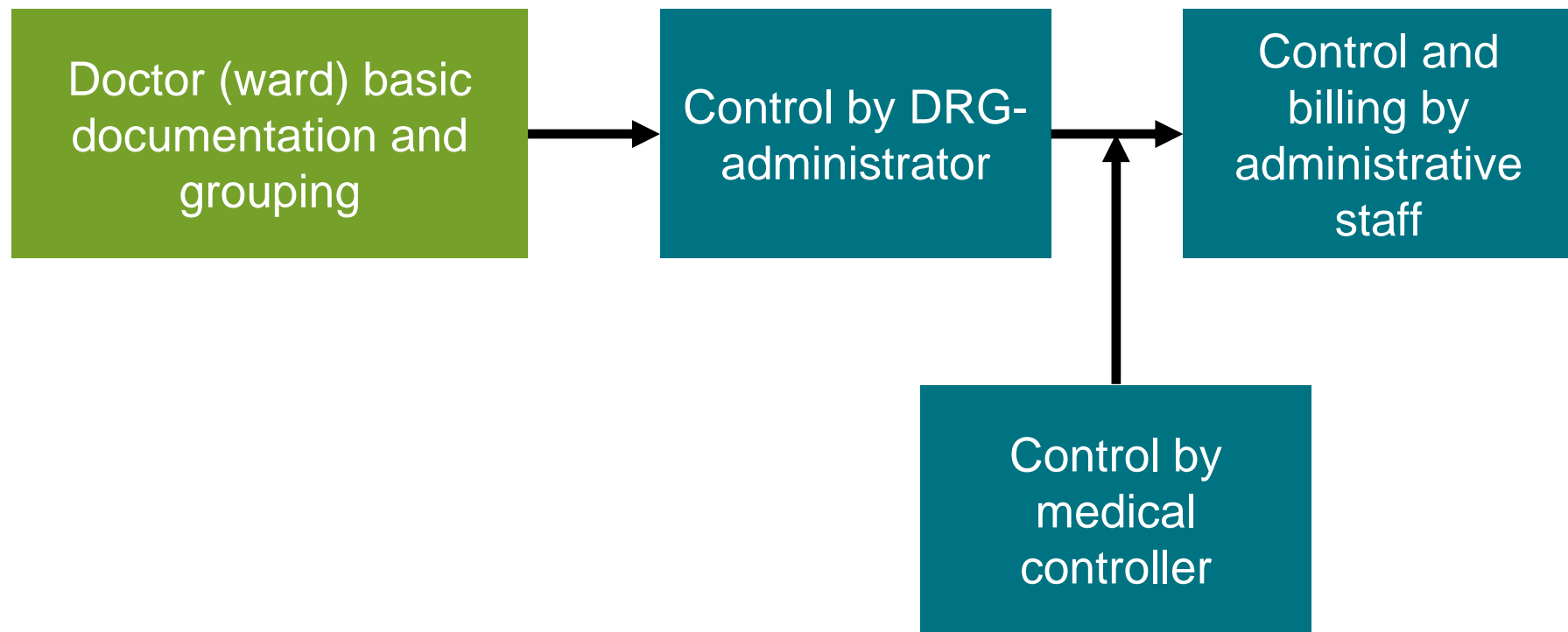
**Cost sensitivity**

**Patient satisfaction**

**Documentation**

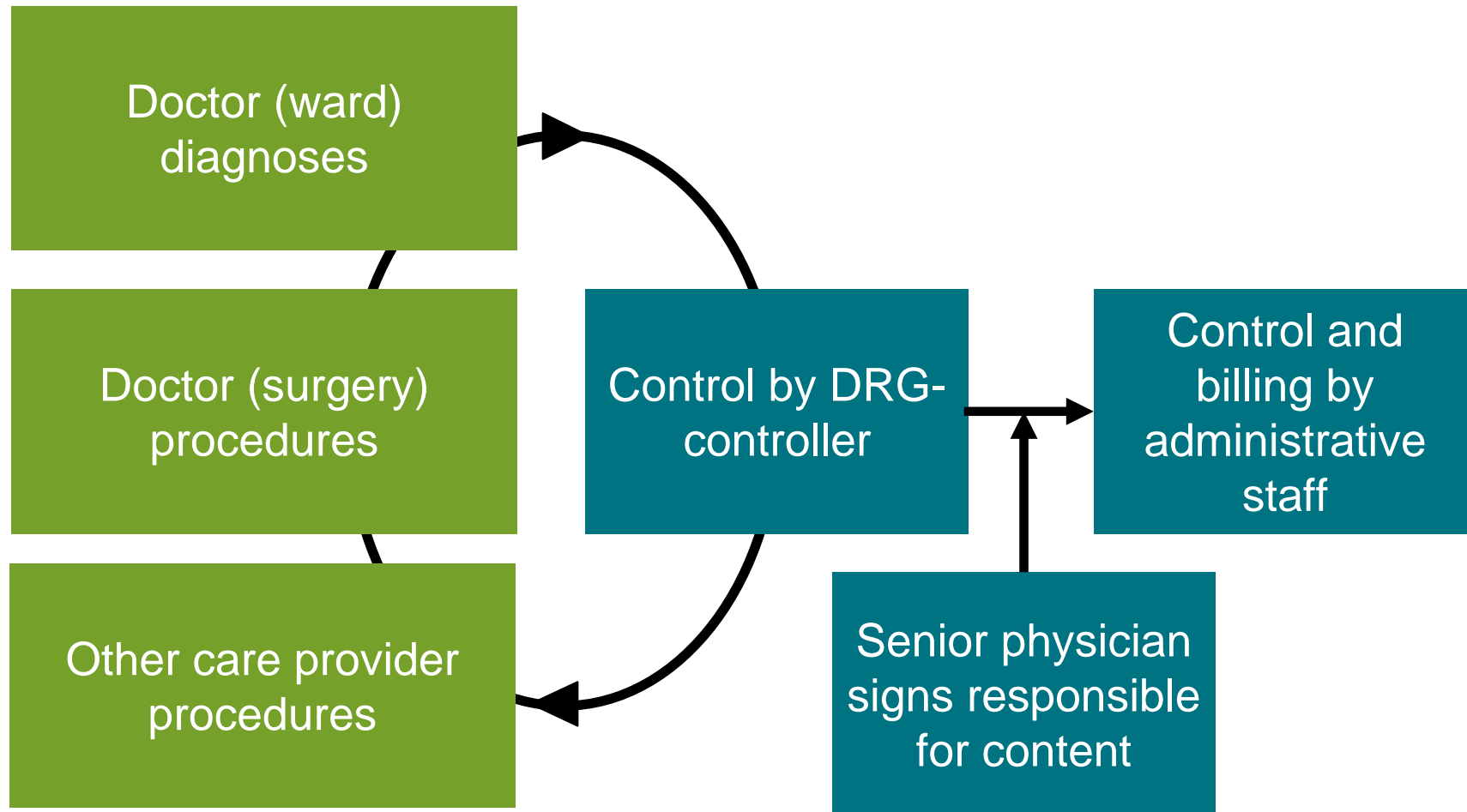
# Coding?

## Doctor model (most common in Germany)



Baller, 2005

# Doctor model University Hospital Heidelberg



Kraus & Farrenkopf, 2005



## Doctor model

- Pro

- Few intermediate steps: potential for quick billing
- Same cost of human resources
- Care provider directly responsible
- Physicians learn to think economically

- Contra

- Risk: missing or wrong coding
- Schooling effort is high, time lag is loss
- Time burden for physicians
- Limited feed-back mechanisms
- Risk of systematic mistakes
- Lack of motivation
- Lack of coding process maintenance, fluctuation

## Doctor model

- Preparation matters
  - Change resources, implementation of DRGs doesn't come for free
  - Not focus on coding only, but also optimize patient treatment processes
  - Information and training helps (surgery vs. internal medicine)
- Mind matters
  - Medical innovations appreciated, administrative innovations disliked; emphasize medical aspects
  - Successful coders likely to accept DRG system, unsuccessful coders reject DRGs
  - Some even prefer coding themselves

Ridder 2007

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# Hospitals under pressure



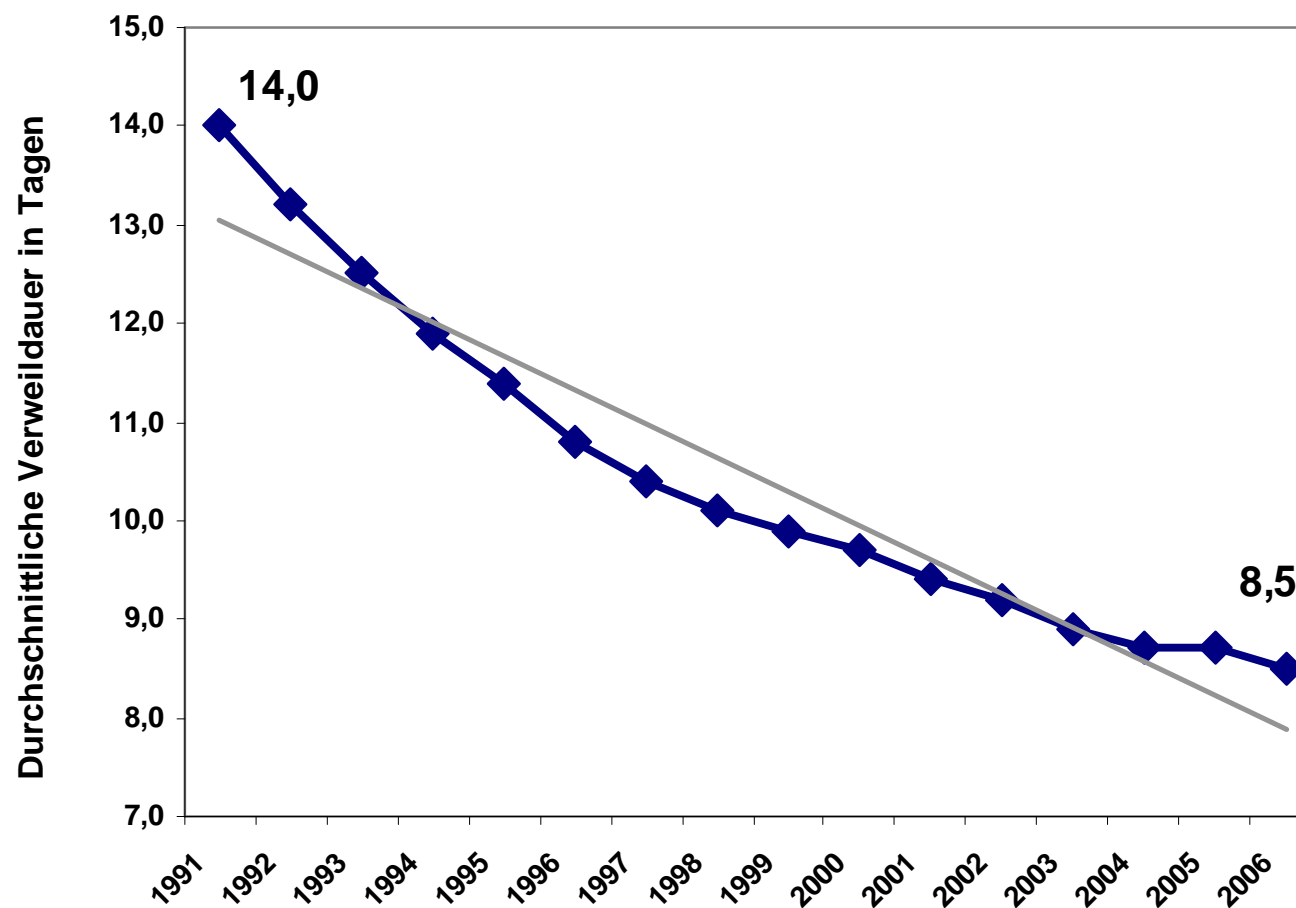


# Hospitals under pressure

- Reactions (examples)
  - Efficiency
    - Length of stay
    - Process management
    - Staffing (Substitution, out-sourcing)
  - Cost efficiency
    - Use of generics
    - Targeted diagnostics
    - Economies of scale (joint ventures)
    - Synergies (partnerships)
- Revenue increase
  - Rise in number of cases treated
  - Extra-budgetary services
- Structural innovation

# Effects of the DRG-System

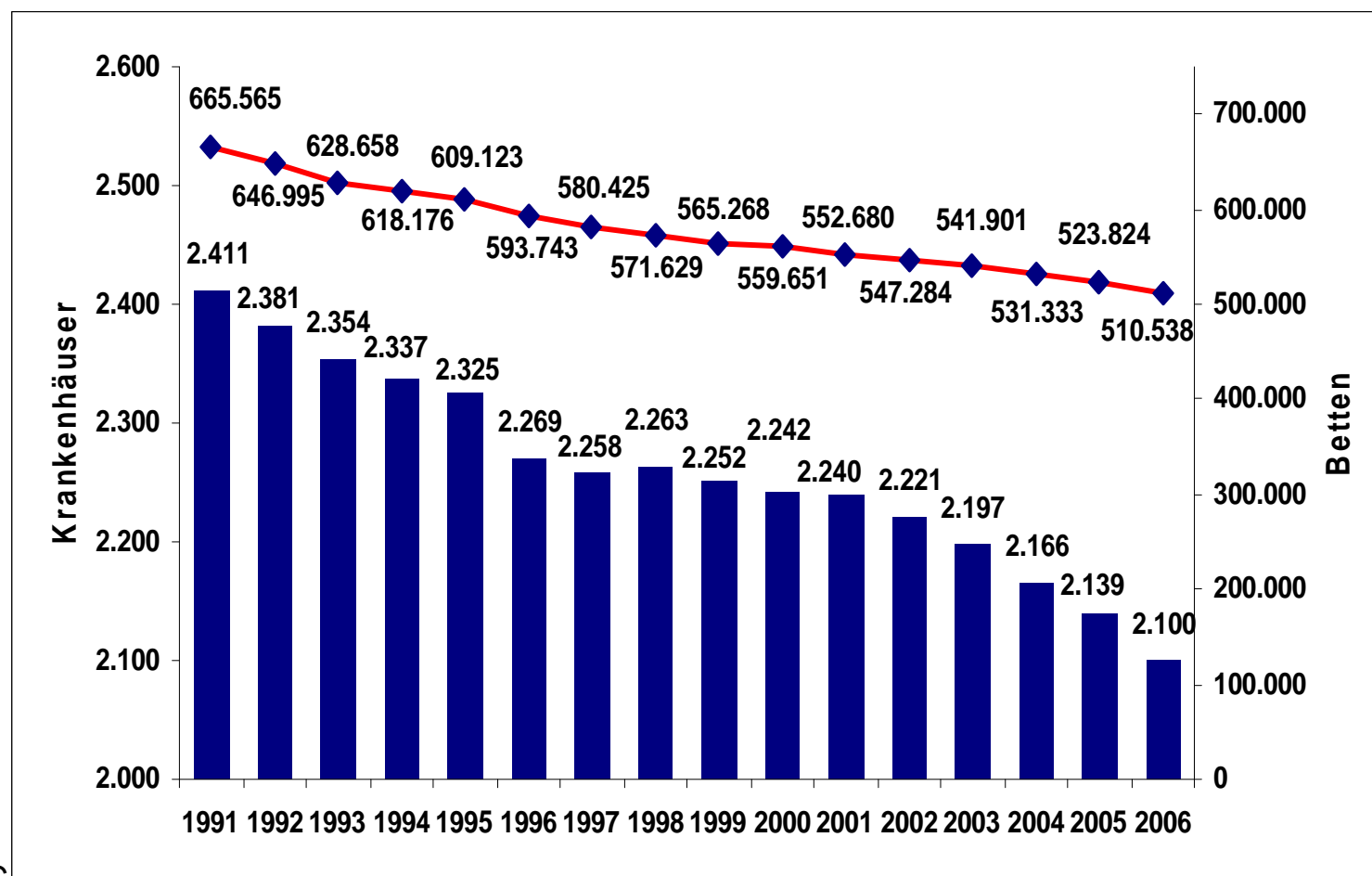
Reduction: length of stay



Dr. Steiner, DKG

# Effects of the DRG-System

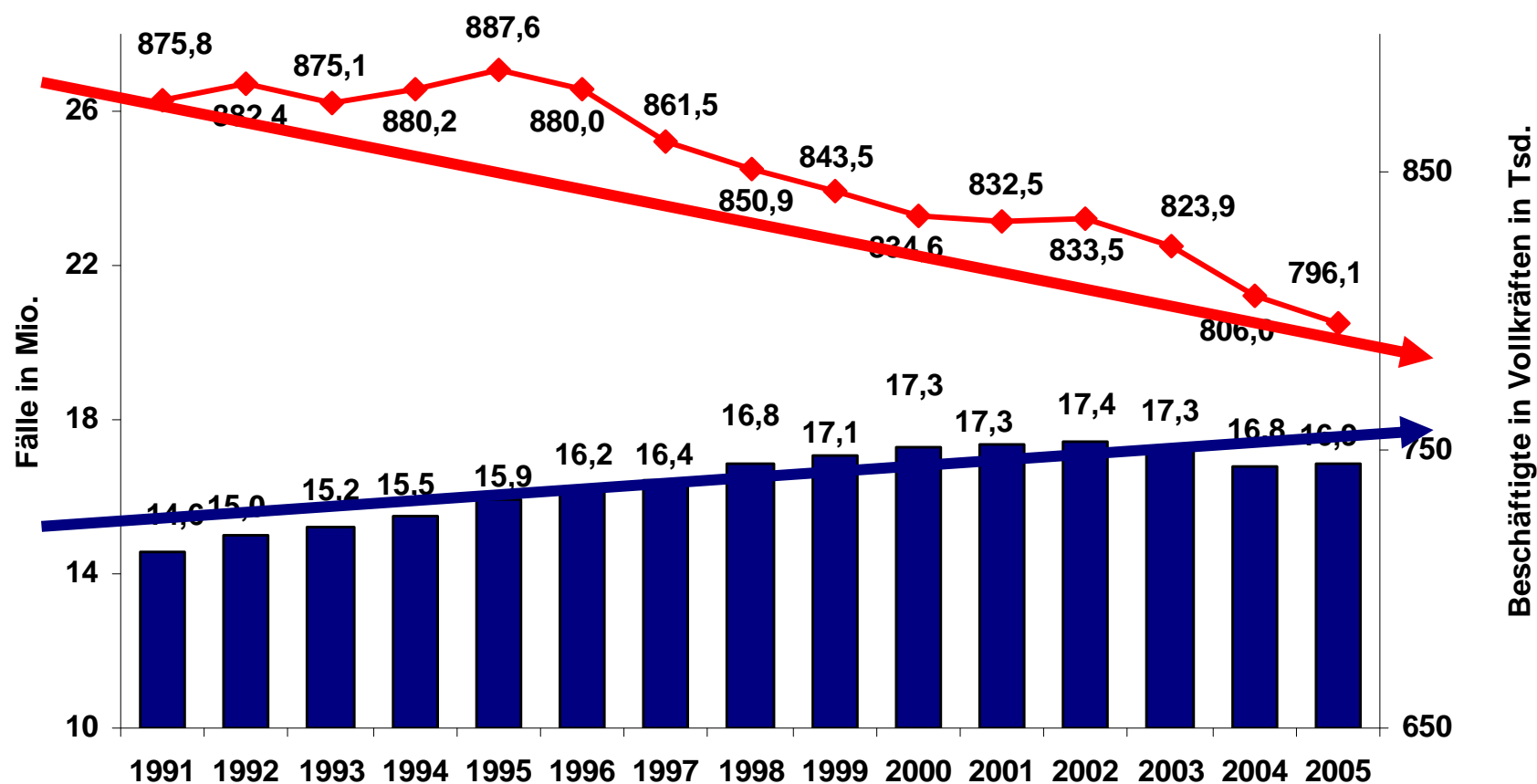
Reduction: hospital beds, hospitals



Dr. Steiner, DKG

# Effects of the DRG-System

Reduction: personal vs. increase: number of cases



Dr. Steiner, DKG



# Effects of the DRG-System

HOME ARCHIV

» Lesen

KLINIK-MARKT

## Krankenhaus wegen Insolvenz geschlossen

Das Evangelische Krankenhaus im ostwestfälischen Rheda-Wiedenbrunn musste seinen laufenden Betrieb abbrechen, weil die Krankenkassen sich weigerten sich, vom 1. Juli 2004 an die Krankenhaus-Verwaltung zu zahlen. Die Kassen eine weiter umstrittenen Klinik nicht ein Patient mit Krankenwagen.

KLINIK@NEWS 0040 060705 (10)

KLINIK-MARKT

## Krankenhaus Leutkirch steht auf der Kippe

Seit 1997 werden die Krankenhäuser des Kreises und der Stadt Leutkirch sowie des Klosters Reute unter dem gemeinsamen Dach „Oberschwabenklinik“ gemanagt. Zu ihr zählen die Einrichtungen Ravensburg, Wangen, Bad Waldsee, Leutkirch und Isny. T. Zusammenschluss und gemeinsamem Management erwirtschaftet die Oberschwabenklinik 2004...

KLINIK-MARKT

## Krankenhaus will schließen

Die Geschäftsführerin des Rot-Kreuz-Krankenhauses Wiesbaden, hat beim Sozialministerium die Schließung ihres Hauses beantragt. Offen ist allerdings, wie das Land mit den Zuschüssen von 3,7 Millionen Euro umgeht, die es für Aus- und Umbau. Nach Auskunft des Ministerium müssen diese nicht zurückgezahlt werden, sofern das Haus wieder sozialen Zwecken zugeführt wird. dass die Klinik in ein Altenheim umfunktioniert werden soll.

KLINIK@NEWS 0040 060705 (119)

### Baden-Württemberg: Klinikschließung

Wie überall in Deutschland wird auch in Waiblingen aufgrund der Sparmaßnahmen im Gesundheitswesen das Stadtkrankenhaus geschlossen.

Waiblingen-Eder-Klinik kämpfen gegen betriebsbedingte Kündigung. Krankenhaus-Standorte. FOTOS: VON BUSSE

DRG system  
=  
Closing hospitals



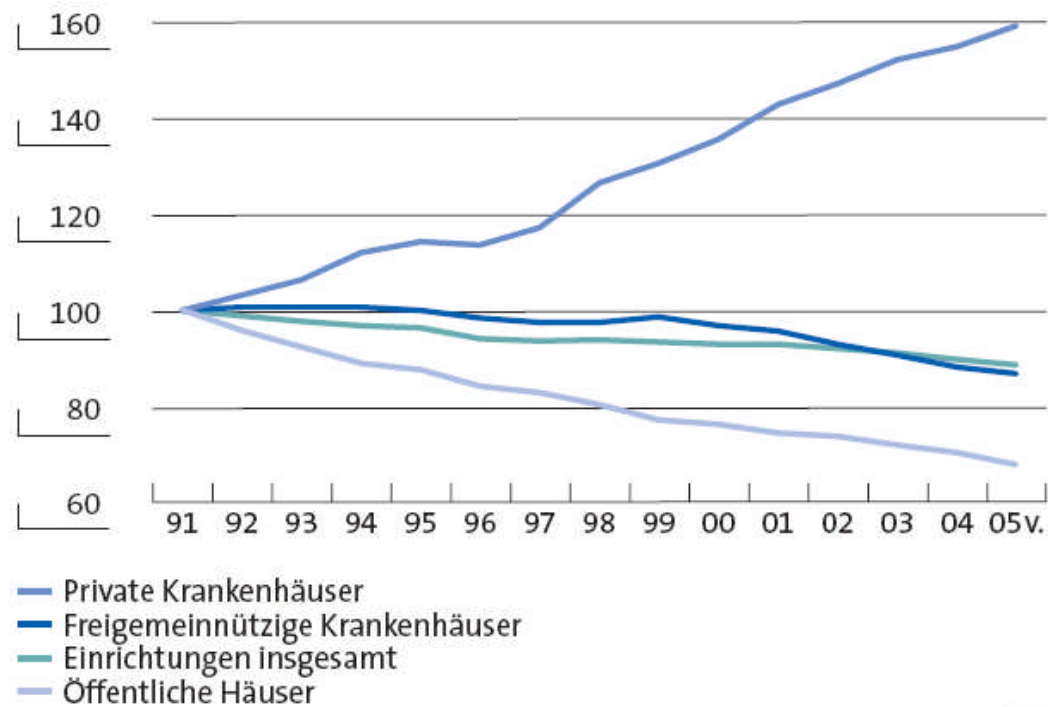
# Effects of the DRG-System

- Positive Observations:
  - Overall technical efficiency improved
  - Number of beds and average LOS reduced substantially
  - Better interaction ambulatory care – hospital care
  - Innovations: Disease Management Programs, outpatient settings
  - Quality assessment: accreditation depends on quality assurance measures, certification procedures, minimum services volumes
  - Transparency obtained

# Effects of the DRG-System



**Ownership of hospitals**  
Change in number of hospitals; Index 1991 = 100

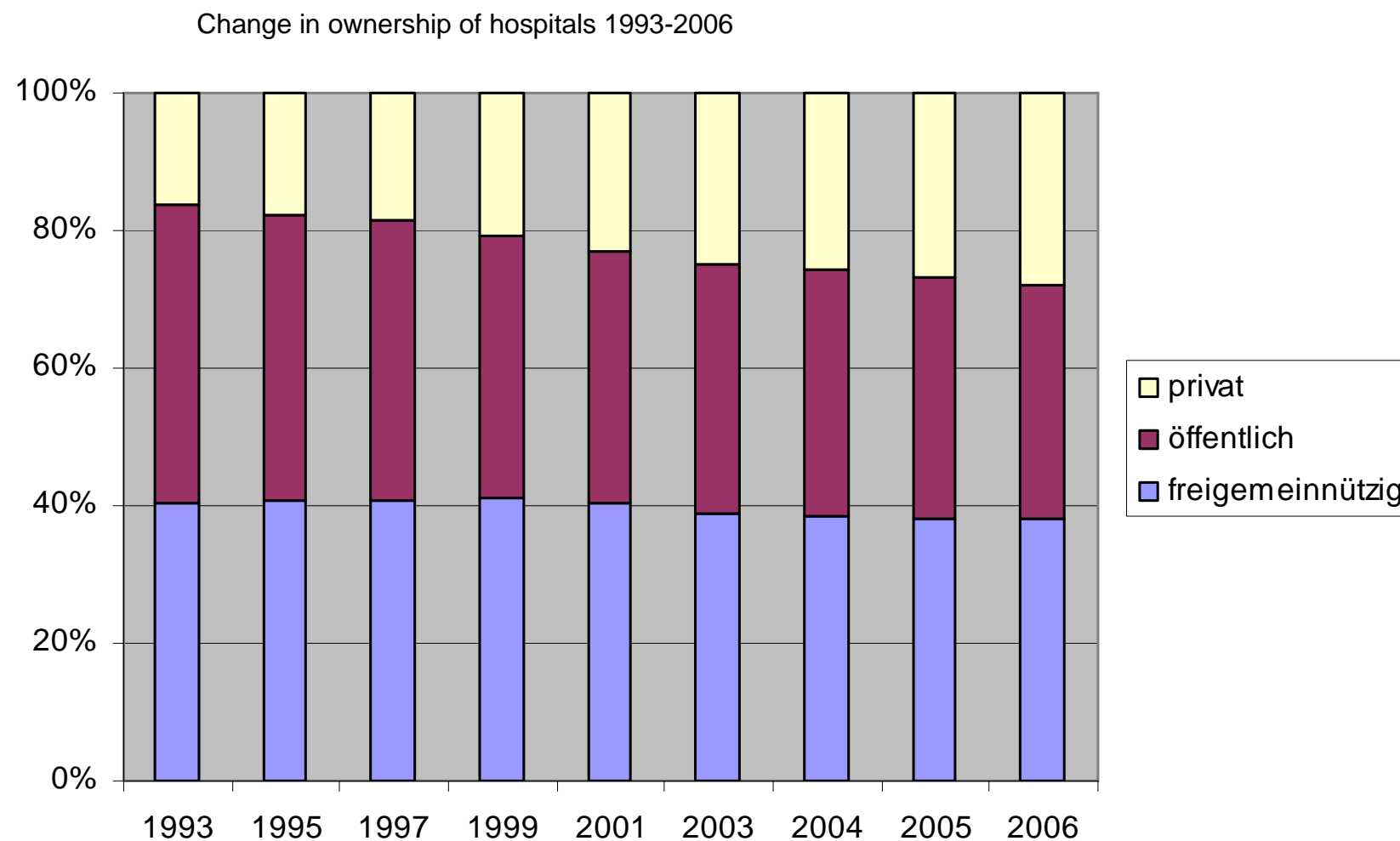


Quelle: Statistisches Bundesamt

v. = vorläufig



# „Wave of privatisation?“?



Quelle: Statistisches Bundesamt

# Hospital ownership in Germany 2006

	Number	Fraction	Cases	Fraction
General hospitals total	<b>1.817</b>	<b>100%</b>	<b>16.356.428</b>	<b>100%</b>
Communal ownership	617	<b>34%</b>	8.443.541	<b>52%</b>
Private not-for-profit ownership	696	<b>38%</b>	5.798.627	<b>35%</b>
Private Ownership	504	<b>28%</b>	2.114.260	<b>13%</b>
Rehabilitation clinics total	<b>1.255</b>	<b>100%</b>	<b>1.836.681</b>	<b>100%</b>
Communal ownership	229	<b>18%</b>	365.889	<b>20%</b>
Private not-for-profit ownership	318	<b>25%</b>	269.854	<b>15%</b>
Private Ownership	708	<b>56%</b>	1.200.938	<b>65%</b>

- Prognosis 2015: 35-40% of hospitals privately owned

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3. DRG systems: basic functioning
4. G-DRG system: implementation in Germany
5. DRGs: process of coding
6. G-DRG system: effects
- 7. Feared adverse effects**
8. Improving medical quality (HELIOS)

## Feared adverse effects & solutions

- Cream skimming
  - Treatment obligations, MDK, competition
- Patient selection
  - The more, the merrier (minimum numbers regulation), competition for patients
- Quality skimping
  - Patient orientation, competition, QM

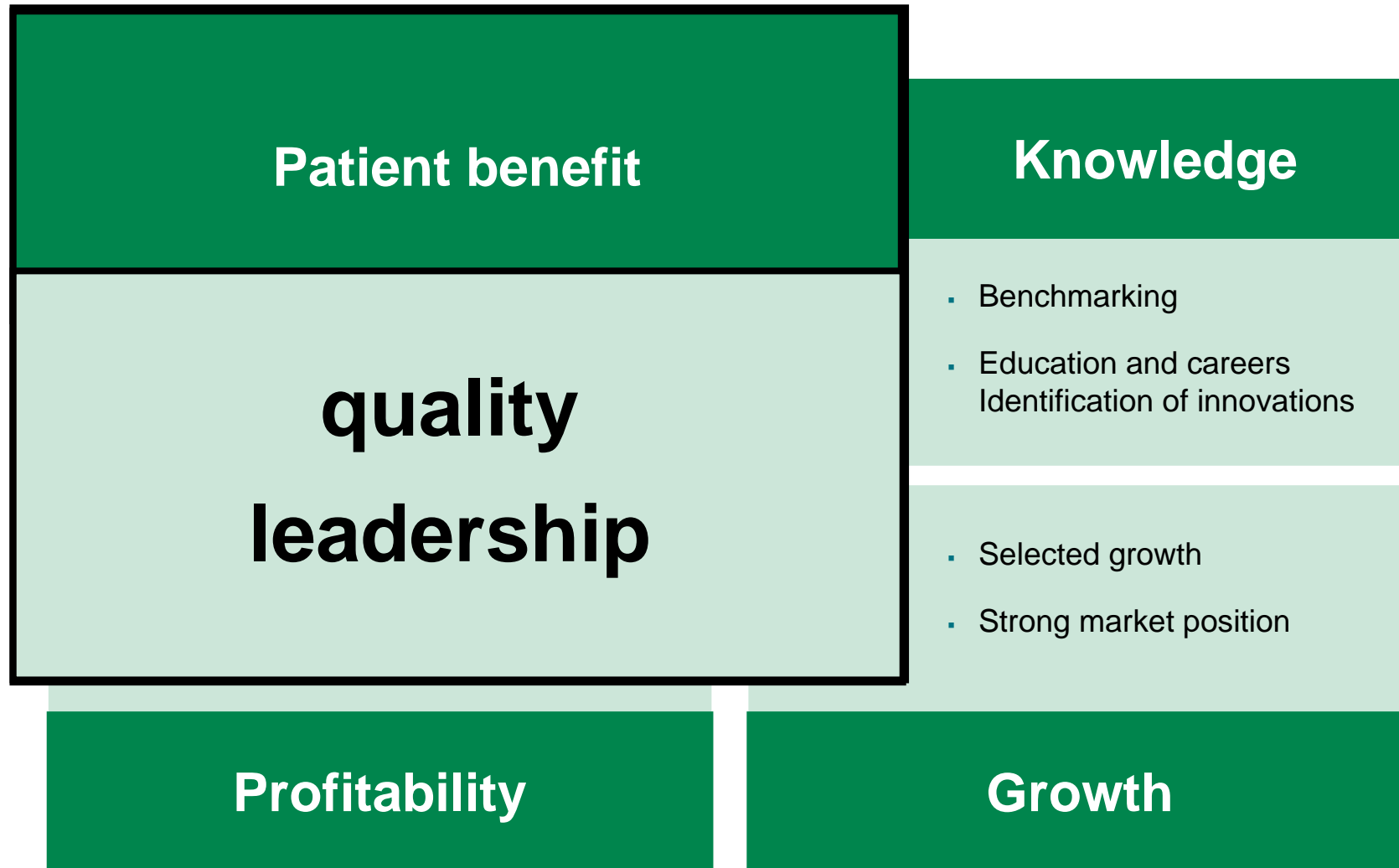
## Structure

1. Introduction to HELIOS
2. Why a new hospital reimbursement system?
3. DRG systems: basic functioning
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6. G-DRG system: effects
7. Feared adverse effects
8. **HELIOS: improving medical quality**
9. Conclusion





## The HELIOS approach: **Quality**

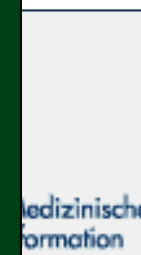


# How to measure quality?

Ärztliches Zentrum für Qualität in der Medizin

Gemeinsame Einrichtung der Bundesärztekammer (BÄK)

und des Kassanärztlichen Bundesverbands (KBBV)



no  
certification



# HELIOS QM: **OUTCOMES**

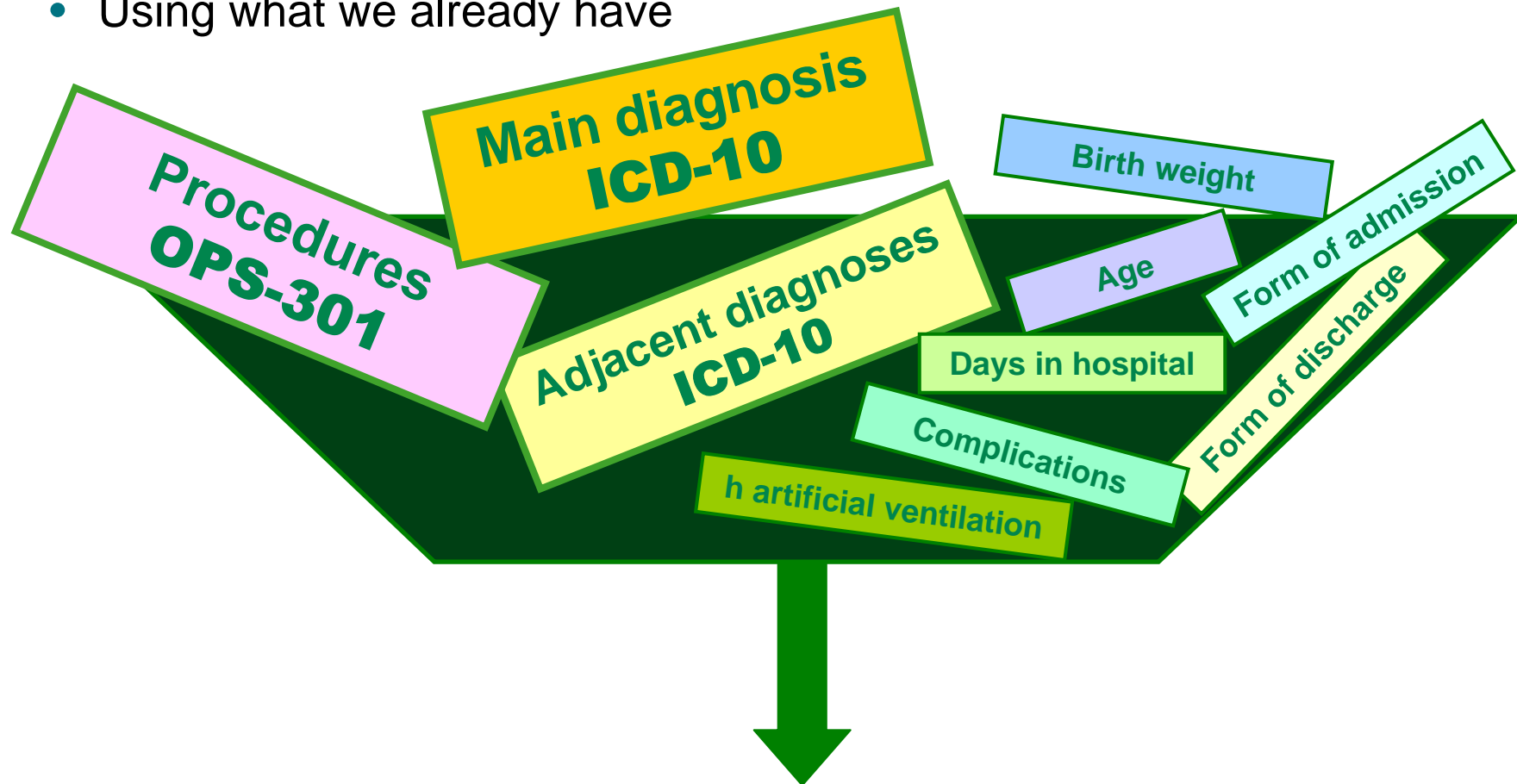
- Division of medical development
  - Basis: **routine data** (DRG), risk- adjusted
  - More than 670 key data sets (since 2000)
  - **30 key diseases**, 142 key data for operations
  - Tracer indicators (**mortality rate**)
  - On company level:
    - **Applied** expert knowledge
    - Quick & easy evaluations;  
**monthly transparency**
    - **Benchmarks**



PD Dr. Thomas Mansky

- Part of G-DRG development
- Architect of HELIOS quality management

- Using what we already have



**Look at it again: plenty of information**

- Primary aim:
  - Main diagnosis: myocardial infarction – mortality rate
- Secondary aim:
  - Main diagnosis: myocardial infarction – mortality rate per age group
- Under observation:
  - Main diagnosis: myocardial infarction, direct admission without referral

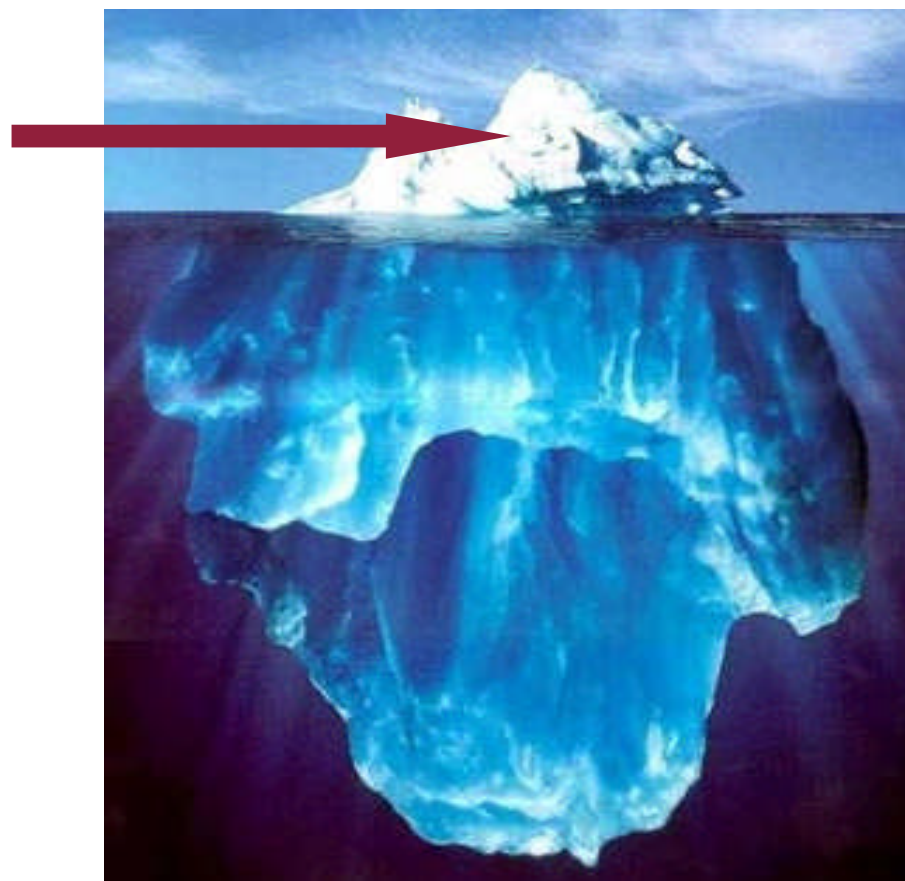
Konkretziel bzw. Leistungskennzahl	Ziel	Quelle*		HELIOS 2005	HELIOS 2004
<b>Erkrankungen des Herzens</b>					
<b>1 Herzinfarkt</b>					
1.1 Hauptdiagnose Herzinfarkt, Anteil Todesfälle, aufgetreten	unter Erwartungswert	St. BA		9,0%	10,0%
Hauptdiagnose Herzinfarkt, Anteil Todesfälle, erwartet	(Bund 10,7%)	St. BA		10,7%	10,5%
1.2 davon Herzinfarkt, Altersgruppe < 45, Anteil Todesfälle	unter 2,6%	St. BA		2,1%	3,2%
1.3 davon Herzinfarkt, Altersgruppe 45-64, Anteil Todesfälle	unter 4,3%	St. BA		3,7%	4,3%
1.4 davon Herzinfarkt, Altersgruppe 65-84, Anteil Todesfälle	unter 12,0%	St. BA		8,9%	10,8%
1.5 davon Herzinfarkt, Altersgruppe ≥ 85, Anteil Todesfälle	unter 28,8%	St. BA		29,6%	29,0%
1.6 Hauptdiagnose Herzinfarkt, Direktaufnahmen ohne Verlegungen, Anteil Todesfälle	Beobachtungswert			13,0%	15,5%

## HELIOS QM: Steuerung

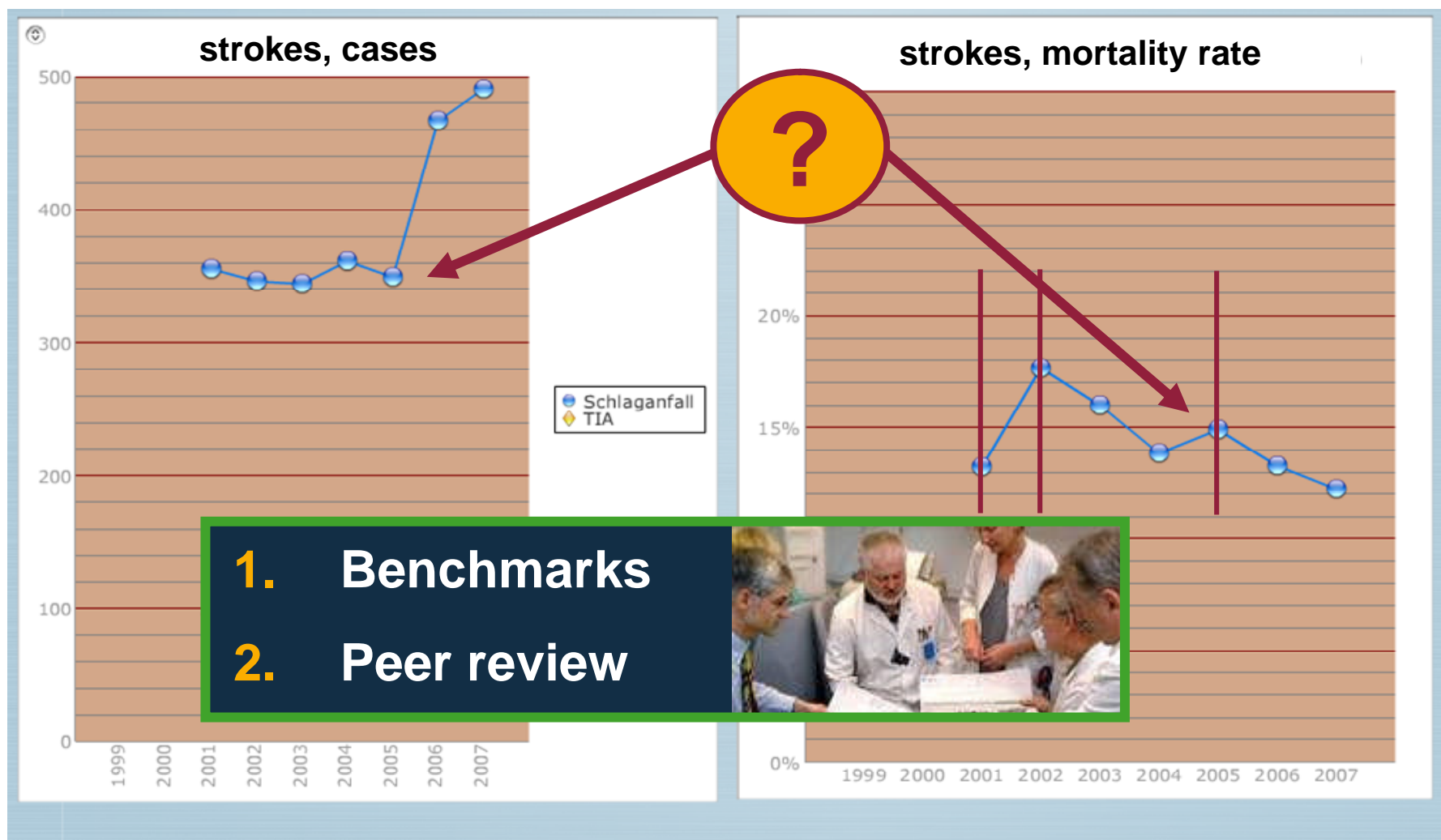
- Achieving medical quality aim is shared target for
  - Heads of medical specialty departments
  - Management
  - Diminishing gap between medical and managerial staff

## HELIOS QM: principle

mortality rate = „top of the ice-berg“



# Example for one hospital: development of stroke cases







# Internal organisation

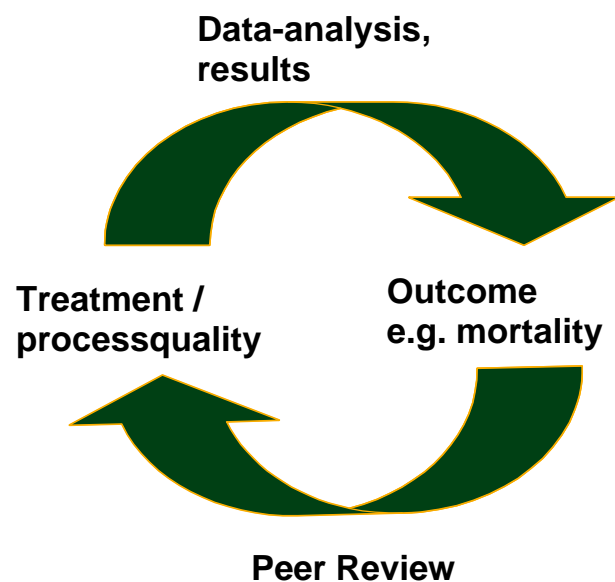
HELIOS medical speciality group	Group leader	Executive	Medical Advisor responsible
1. Kardiologie, Nephrologie und Pneumologie	PD Dr. med. H. Lapp	P. Küstermann	Dr. med. W. Krahwinkel
2. Gastroenterologie, Hämatologie, Onkologie, Endokrinologie und Rheumatologie	Prof. Dr. med. L. Greiner	H. Henke	Dr. med. M. Liebetrau
3. Anästhesie	Dr. med. G. Burgard	O. Jedersberger	Prof. Dr. med. A. Meier-Hellmann
4. Neurofächer (Neurologie, Neurochirurgie und Neuroradiologie)	Dr. med. G. Ickenstein	E. Zimmer	Dr. med. M. Liebetrau
5. Geriatrie	Dr. med. G. Orth	E. Zimmer	
6. Orthopädie und Traumatologie	Prof. Dr. med. J. Zacher		
7. Radiologie, Strahlentherapie und Nuklearmedizin			
8. Visceralchirurgie und Thoraxchirurgie			
9. Gynäkologie und Geburtshilfe			
10. Pädiatrie und Neonatologie			
11. Angiologie und Gefäßchirurgie			
12. Urologie			
13. Augen			
14. HNO/MKG			Dr. med. W. Krahwinkel
15. Psychiatrie	Dr. med. A. Broocks	F. Simon	Dr. med. M. Liebetrau
16. Pflege	Fr. M. Riese	K. Gräppi	Dr. med. H. Ratayski
17. Dermatologie	Fr. Prof. Dr. med. R. Linse	F.D. Gahrman	Dr. med. W. Krahwinkel
18. Intensivmedizin	Dr. med. O. Franke	U. Klingel	Prof. Dr. med. A. Meier-Hellmann
19. Wirbelsäule	Prof. Dr. med. J. Kiwit	J. Reschke	Dr. med. H. Ratayski
20. Hygiene	Prof. Dr. med. H. Rüden	P. Küstermann	Prof. Dr. med. A. Meier-Hellmann
21. Pathologie	Dr. med. R. Hinze	F. Simon	Dr. med. M. Liebetrau
22. Labordiagnostik	PD Dr. rer. nat. M. Mehl	P. Küstermann	Dr. med. W. Krahwinkel

**22 Medical Specialty Groups  
= bunch of experts; all chiefs**

## Central Peer-Review

- Peer-Review-Process: core element of the quality management and principal task of medical advisory board

### Peer-Review-Process



- Conspicuous results for the **33 medical targets** get a **Peer-Review-Process** started
- **Critical discussion** between Department Head, Medical Director and Head of Administration
  - **Diagnostics** and treatment **adequat** and timely?
  - **Appropriate indication** for **therapy** at the right time?
  - **Therapeutic process** appropriate?
  - **Therapeutic action** taken critically **analyzed** when carried out?
  - **Complication management**?

# Central Peer-Review

- In 40% of cases potential for improvement

Untersuchte Tracer („Aufgreifkriterien“)	Zahl der Verfahren	Fallzahl	Fälle mit Optimierungspotenzial		Fälle mit Kodierfehler		Fälle ohne Verbesserungsbedarf	
			n	%	n	%	n	%
Viszeral- / gefäßchirurgische Verfahren: Langlieger in der Chirurgie, Todesfälle bei Operationen (kolorektal, Pankreas, arteriellen Gefäße und Aorta)	3	53	20	37,7	1	1,9	32	60,4
Unfallchirurgische / orthopädische Verfahren: Langlieger, Re-Operationen und externe Verlegungen; ferner Todesfälle bei Schenkelhalsfraktur und elektiver TEP	4	115	58	50,4	3	2,6	54	47,0
Konservativ: Todesfälle bei Schlaganfall, (primärer) Pneumonie und Pneumonie als Komplikation	3	68	19	27,9	14	20,6	35	51,5
Todesfälle bei Beatmung über 24 Stunden bei operativ und konservativ behandelten Patienten	5	87	42	48,3	1	1,2	44	50,6
Gynäkologische Patientinnen: Langlieger	2	44	11	25,0	2	4,6	31	70,5
<b>gesamt</b>	<b>17</b>	<b>367</b>	<b>150</b>	<b>40,9</b>	<b>21</b>	<b>5,7</b>	<b>196</b>	<b>53,4</b>

## Patient benefit is the main aim of HELIOS

**HELIOS mortality ratio<sup>1)</sup>** = HELIOS mortality rate compared to German average mortality rate:



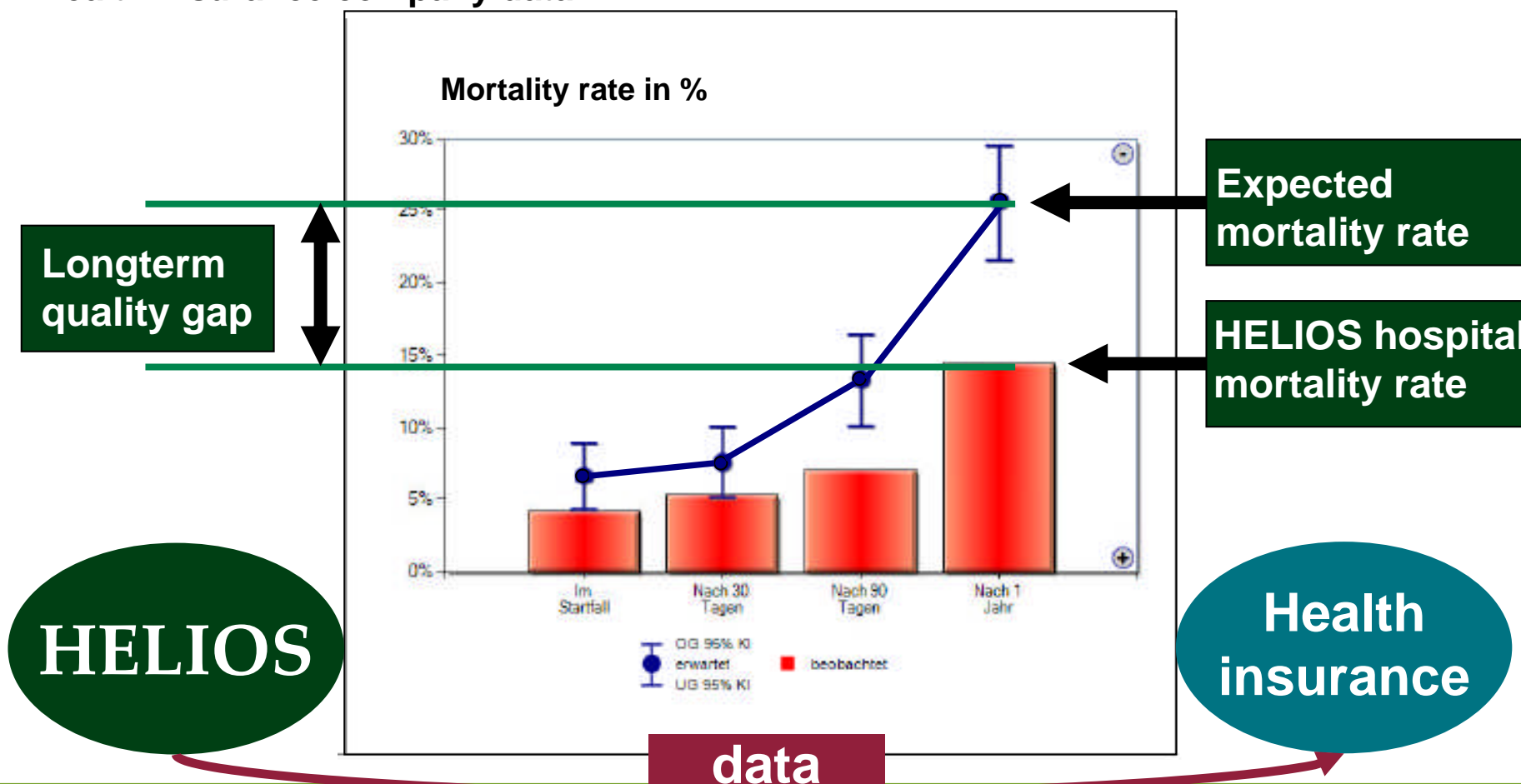
**0,82**  
(6250 / 7617)



1) 2004 – comparable data from all company hospitals after a quality check of at least 3 years

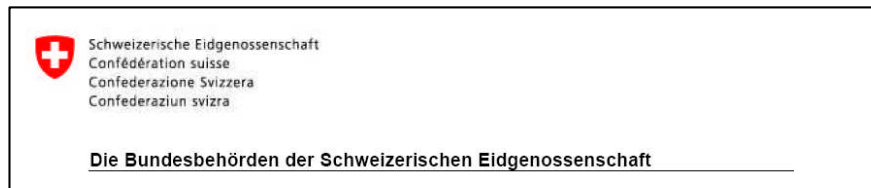
## QSR-Project: congestive heart failure

Mortality rates at the beginning, after 30days /90 days /1 year  
Health insurance company data



# HELIOS QM widely accepted

- HELIOS quality management system used in Switzerland



- > 200 German non-HELIOS hospitals are clients of 3M = HELIOS quality management system



- IQM – quality initiative

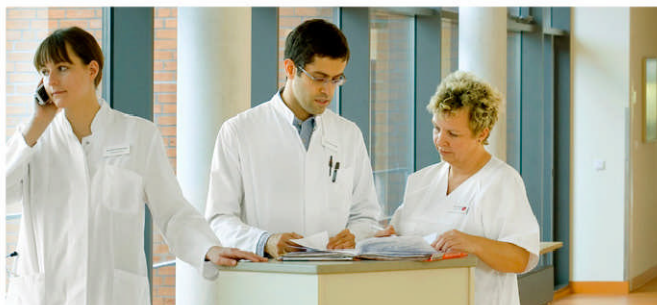
- 1 mio patients annually
- Transparency: publication of the results
- Verifiability: practicing quality management based on routine data
- Improvement: peer reviews to solve weaknesses



Finally...



**Private provision = quality care !?**



Jeder Moment ist Medizin



# Thank you for your attention

HELIOS Kliniken Group

[www.helios-kliniken.de](http://www.helios-kliniken.de)